Recommendations

Recommendations

The principles described in the preceding section define the essential goals and guiding ideas for the vision of the San Diego River Park. The recommendations that follow describe specific strategies for achieving the intent of the principles.

It is important to note that while each recommendation fits into a larger, comprehensive vision for the river, no single recommendation is meant to address every location or every situation along the length of the river corridor. The Master Plan's single overarching recommendation is one of flexibility, seeking opportunities as they arise with property owners to implement the Plan's ideas.

The San Diego River Park is many parks and one park. In the initial part of this section, the general and reach-specific recommendations address measures to improve elements of the river corridor, create new parks and expand recreational and habitat resources. Five key recommendations are identified that apply to all reaches of the river and extend beyond the valley itself linking the entire river corridor into a coherent system. The remainder of the section is organized by general recommendations relating to four elements of the San Diego River Park: Hydrology and Water Quality, Habitat and Wildlife, Recreation and Cultural Interpretation, and Public Art. The general recommendations are followed by Specific Recommendations for each reach.

The Hydrology, Habitat and Wildlife, Recreation and Culture, and Public Art each have a set of related benefits and influences that interrelate. These multiple elements must be considered in the implementation of every facet of the River Park, especially in confined areas. Each recommendation must be considered in the context of how it influences and is influenced by its effect on other systems, and how it can be woven into the fabric of the City itself. Every action taken toward creating the San Diego River Park, large scale and small must consider the role it plays as a part of the whole, to reinforce the perception of the river, valley and canyons as a complete natural and urban system.

The vision of the San Diego River Park crosses boundaries of land ownership, special interests, disciplines and jurisdictions; the ultimate whole is greater than the sum of its parts. Creating the San Diego River Park will require a multi-disciplinary approach and the collaboration and cooperation of a diverse group of public and private entities to implement the many discrete but interrelated elements.

Many of the ideas expressed in the Principles and Recommendations in this plan were first discussed thirty years ago in Kevin Lynch's *Temporary Paradise* and further developed in the *San Diego River Conceptual Plan*. In addition, the *City of Villages Plan* incorporates the idea of using the open space and the transit corridor of the river to link and define the communities along the river. The San Diego River Park will create an interesting sequence of places with unique characteristics that stem from the natural conditions of each reach and community.

An example of where nature, river and city meet along the San Diego River

Exploring the edge of the San Diego River near Carlton Oaks Golf Course

Key Recommendations:

Return the river to health.
Improve the river pattern and water quality by separating stream flow from ponds; look for opportunities to create a wider riparian corridor with more meander. Improving water quality will allow the river to support all other beneficial uses including wildlife habitat and recreation. Remove invasive non-native vegetation and plant a diversity of native species to re-establish a range of native plant communities.

Remember the big picture.
Connect the valley to adjacent open space including the beaches, Mission Bay Park, Tecolote, Murray, Ruffin, Murphy, Elanus, Bachman, Collwood, Alvarado and Navajo Canyons, and Mission Trails Regional Park, to create an ecostructure of a unified native landscape by transforming rights-of-way, acquiring land and creating easements.

Build city wide connection.
Establish a continuous trail system from the ocean to Mission Trails Regional Park and from canyon to canyon with frequent access to transit, canyons and neighborhoods. Coordinate with Community Plans, the San Diego Bicycle Master Plan, adjacent jurisdictions and other current planning efforts to develop specific locations for neighborhood connections and route alignments.

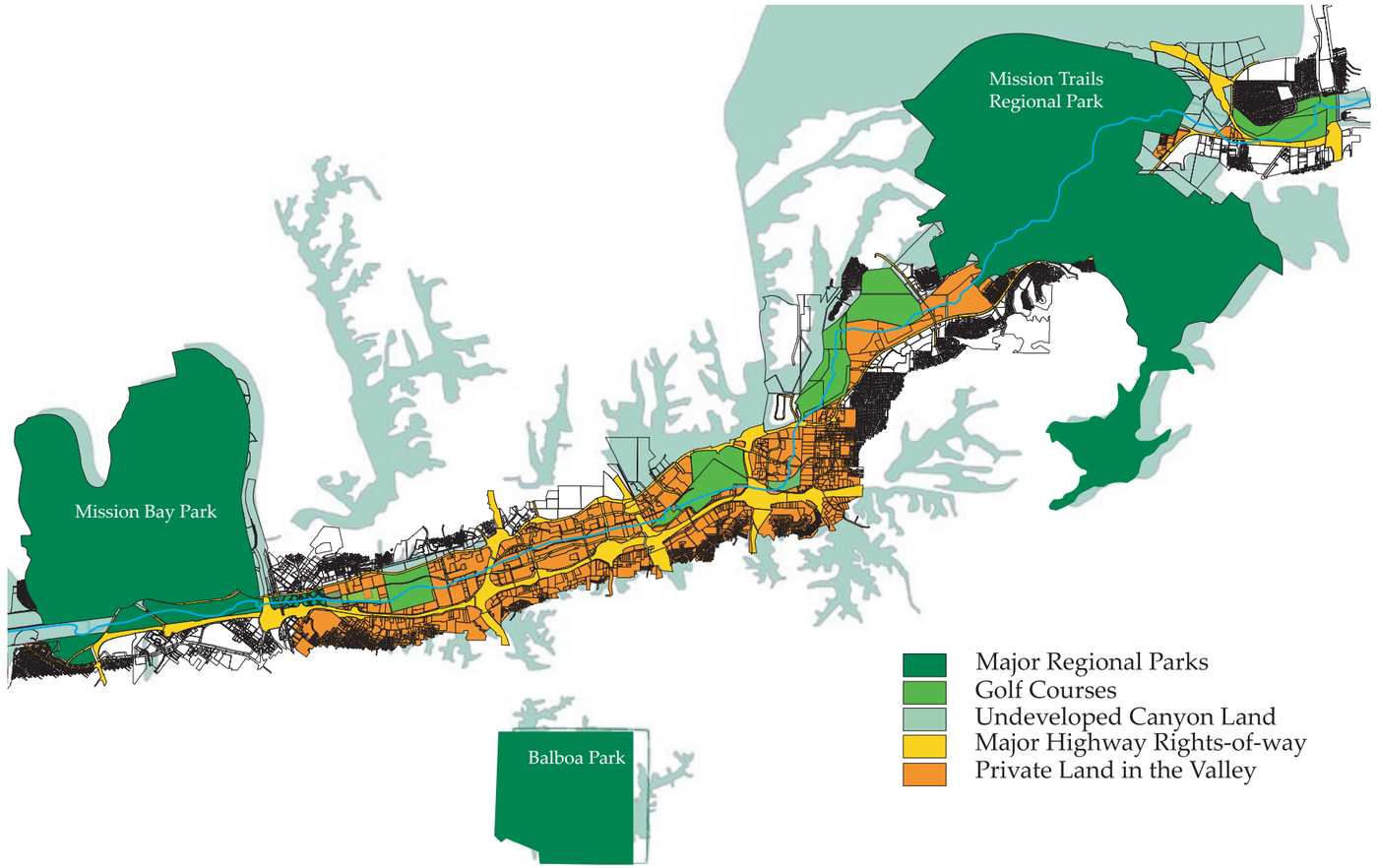
Assemble a beautiful infrastructure.
Integrate infrastructure (transportation, utilities, stormwater) and ecostructure (rivers, vegetation, wildlife corridors, habitat) into "beautiful infrastructure" making key ecological and infrastructure functions visible. Partner with public agencies to transform roads, bridges, the trolley, parking lots, culverts, channels and utility easements to be part of a unified landscape, maintaining and enhancing connections between adjacent natural habitats, residential communities, and the San Diego River Park.

Create a sequence of unique places and experiences.
Establish a linked string of parks and open spaces through land acquisition, easements and partnerships with land owners in key locations. These open spaces will serve a variety of needs providing valuable protected habitat in some places and access to the river and connection to adjacent development in others. The opportunity to educate visitors about all of the different stories about the river is part of all of these places. Collaborate with and support community planning efforts to identify areas for redevelopment and new development to have a river focus, to identify potential land to acquire for parks and open space. As redevelopment occurs, engage land owners and developers in the San Diego River Park process to support the creation of places that are mutually beneficial.


Connecting habitat and open space such as Tecolote Canyon


Trail connections will link neighborhoods with the river


Flowing river in Mission Trails Regional Park



Parks, open space and highway rights-of-way combine infrastructure with ecostructure

General Recommendations: Hydrology and Water Quality

Intent

The San Diego River Park will create a healthier river, one that flows with cleaner water and invites people to see, visit, smell, and listen to it. A healthy San Diego River will become the symbol and embodiment of the river valley's natural character.

The San Diego River Park seeks to return the San Diego River to a cleaner, healthier condition that showcases a naturalistic California river within the City's urban setting. To create a healthy San Diego River specific benchmarks must be met:

- It will be free flowing from Old Mission Dam to the ocean.
- It will be meandering, braided, and free of ponds.
- It will be bordered with native riparian vegetation that provides habitat for wildlife and filtration of urban runoff.

The creation of the San Diego River Park in the City of San Diego can not lead to a cleaner river on its own. The river is impacted along its entire length and the entire watershed must be considered, as the impacts of inland sources of pollutants impair water quality downstream and in coastal environments many miles away.

A healthy river does not, however, mean returning the river to its pre-impoundment flow, unpredictable and ephemeral; such an approach is neither achievable or desirable. While the current year-round flow has been a factor in supporting extensive invasion by exotic species, it will ensure a reliable water supply to maintain diverse and healthy natural riparian habitat.

Human activity has pushed and squeezed the river for decades, resulting in constrictions, channelization and ponds, both from mining and for flood control. The San Diego River Park should look for opportunities to separate river flow from ponds, remove river constrictions, and broaden the width of the river's meander belt (that portion of the flood plain in which the river alters its course as a result of a major flood event) to allow the necessary width for meandering and braiding. These improvements will result in a longer river, which will in turn expand riparian habitat and improve water quality through the increased duration of water contact with soil and vegetation.

Recommendations

Seek opportunities to:

- Augment flows to the river periodically.
- Remove/circumvent obstacles that impede flow.
- Remove invasive vegetation species.
- Encourage the growth of appropriate riparian vegetation.
- Re-contour the channel to encourage meander and braiding.
- Expand the floodplain.
- Adopt programs to reduce/remove non-point source loads of pollutants and prevent pollutants from entering the river at their source.
- Incorporate hydrology & water quality considerations in all future planning and guidance documents
- Provide interpretive information regarding the value of the river, clean water, and importance and process of rehabilitating the river.
- Explore potential to benefit from reclaimed water.

Augment flows to the river.

Although the pre-disturbed condition of the river was one of ephemeral flows (dry during certain times of the year), the persistent condition is now perennial flows (at least some flow all year long). It is unlikely that flow in the river will be dramatically augmented by natural or non-accidental means. Rather, the extreme demand for a consistent water supply for human use and increasing attention to water efficiency make it more likely that flow in the river will continue to diminish during the dry season. The result of reverting to an ephemeral, or semi-ephemeral system, whether through conservation or conscious design, would be a more barren riparian corridor supporting less biodiversity than present conditions.

The existing perennial flow supports a relatively abundant riparian biological community, and for this reason the flow should be maintained to some degree. The river's perennial flow is most likely the result of return flow from urban and suburban activities such as irrigation. The flow is also augmented by some contribution from groundwater sources. The relative contribution from each of these sources is not well understood at this time and will require further investigation. Means to augment the flow should also be investigated; reclaimed wastewater might be a possible source for the augmentation, as would water purchased for release. Regardless of source, the water should closely mimic existing river conditions in measures such as temperature and salinity, and augmented flow should occur periodically, to mimic historic patterns of flow. These seasonal pulse flows also offer the opportunity for sediment transport and would create disturbance/recovery cycles for ecosystems. The potential to augment flows should be fully explored with the Padre Dam Municipal Water District and Regional Water Quality Control Board.

Remove/circumvent obstacles that impede flow.

Numerous impediments exist in the channel and in most of the streams and creeks that are tributary to the channel. These disconnects include ponds, lakes, culverts, roads, and dams. These elements segment habitat, disrupt water flow and create barriers for species movement. The flow of the river is inadequate to sufficiently flush the ponds, leading it to collect into standing pools, particularly where historic gravel mining has removed material from the river channel. The relatively shallow pools and minimal flow lead to an increase in water temperature, promoting algae/macrophyte growth, both serious issues for riparian systems. The still water also promotes a deposition of sediments resulting in downstream deprivation of sediment load.

Planning efforts that encourage the removal and/or circumvention of impediments to improve flow characteristics and reconnect habitat fragments should be continued. However, the water volume, pond depth and the flow conditions of the river in various reaches will affect the specific conditions of each pond. As the River Park and adjacent land is designed and developed, each pond should be studied specifically to create the best and most appropriate hybrid that is most beneficial to improving the water quality of the river, expanding native plant communities and adding value to adjacent development. While the ponds have a negative effect on the hydrology of the river, they offer recreation and community opportunities for fishing, boating, birding and other activities. It is beneficial to the river to separate the channel from the ponds, but with aeration and other treatments the ponds can remain as assets to the River Park.

Historic gravel mining has resulted in numerous ponds

Remove invasive vegetation species.

As it relates to hydrology and water quality, the presence of dense, invasive vegetation results in an impediment to flow. Invasive species also result in dramatically increased evapotranspiration of water that would otherwise remain in the channel or be used by more productive species. In an effort to reduce flow impediments and better utilize the limited water quantity in the channel, efforts should be made to eradicate invasive species of plants throughout the watershed.

Arundo donax has invaded many sections of the river

Encourage the growth of appropriate native riparian and upland vegetation.

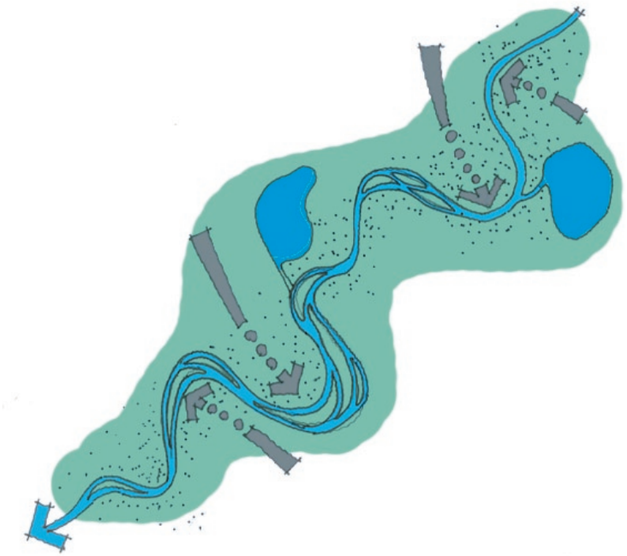
Appropriate and continuous native riparian vegetation has direct benefits to hydrology and water quality. Continuous native vegetation communities form upland canyons and slopes to the riparian river valley create conditions needed to encourage wildlife to move between the canyons and the river. As indicated in the preceding recommendation, inappropriate vegetation impedes flow and squanders water. Exotic species should be removed, and the areas replanted with native species. Best management practices should be implemented to encourage the propagation of existing native species.

Less-dense, native vegetation will cause significantly fewer circulation problems and require less water than invasive species. Additionally, a variety of a native species may be used to more effectively "cleanse" urban runoff through nutrient uptake. By spreading the area of contact of the river and river bed, groundwater infiltration can be increased. When combined with vegetation, pollutant filtration and removal can be increased. In certain situations, contaminated groundwater can be treated through phytoremediation, or biological filtration through uptake. Such an approach would require careful study and should not displace native habitat in the corridor.

Re-contour the channel to encourage meander and braiding.

Over the past decades, the river has become increasingly channelized by projects that seek to transport water from higher to lower elevations in the most efficient manner. Most efficient has often meant minimizing space for the river to maximize land available for development. The net result of these projects is a relatively straight channel with artificially raised banks. This condition has removed the river's natural meander and braiding, depriving it of its natural flood cycle. The term meander refers to a river's naturally winding path; braiding refers to river that has carved multiple simultaneous channels, diverging from and rejoining itself. Both of these river patterns (contrasted to a straightened, channelized path) contribute to greater riparian habitat, greater groundwater recharge and reduced velocity. Without meanders and braiding, the river's current channel is shorter overall. With the same amount of water concentrated in less space, flow velocities are relatively higher than before channelization.

Although it is impractical to consider returning the floodplain to the river in any substantial form, it is possible to increase river length and decrease flow velocities. Where possible, the low flow portion of the channel should be reshaped to include meanders. By increasing the river length, there is an inherent increase in the riparian corridor and available habitat. The longer reaches also result in decreased flow velocities.



A braided meandering river supporting a broad riparian environment that filters urban runoff

Channelization of Tecolote Creek

Expand the river's recharge area.

In conjunction with the preceding recommendation and where such opportunities exist, the river's length can be increased-via meander- by removing artificial levees that constrain the river. A number of such floodplain expansion programs have been successfully executed throughout the country on similar rivers; these programs have paid careful attention to the potential risks associated with flooding and have proved to manage the risks well.

Past development in the floodplain and projects that have channelized the river exacerbate flooding problems and increase the potential economic damage of major flood events. Development should look for ways to provide future projects that would not degrade the river's natural carrying capacity, water quality or riparian habitat. Such land use decisions should be made with sensitivity to the river.

Expanding wetlands and creating new ones through restoration or construction will contribute to improving water quality by filtering pollutants and will serve as a refuge for native flora and fauna, allowing them to re-establish after flood events.

The hydrologic junction between fresh water and salt water at the estuary is especially sensitive. Conditions that encourage the growth of exotic species should be eliminated. Back waters off the estuary should be created to serve as wildlife refuges and buffer against future damaging events such as the 1983 flood.

Adopt programs to reduce/remove non-point source loads

Preventing pollution at its source is the best and most cost effective approach to improve the water quality of the San Diego River. During wet weather events, the first flush of contaminants from most urban and suburban surfaces is transported directly into the river via storm drain systems. Ongoing low flow in these systems continues to trickle contaminants into the river. Although the City has a relatively advanced program to identify pollutants and to educate citizens in this area, a significant quantity of pollutants continue to enter the river via storm drains.

Stormwater is governed by the San Diego Municipal Storm Water NPDES permit. The permit directs municipalities to implement an urban runoff management program on a jurisdictional and watershed level. The intent is to prohibit pollutant discharges into the storm water conveyance system, implement best management practices, ensure that storm water discharges do not cause exceeding of water quality objectives, identify and eliminate sources of illicit discharges, and enforce local municipal water quality related ordinances.

The City should acknowledge the linkages between land use in urban and suburban developments to impacts on the river, and develop comprehensive programs to eliminate these detrimental effects by implementing high standards on new development and redevelopment as it relates to non-point source runoff. Some examples include requiring compliance with numeric standards, mandatory structural practices (swales, infiltration basins), and mandatory non-structural practices (restricted irrigation, aggressive street cleaning). Localized approaches to non-point source pollutant reduction/elimination is the only alternative to massive, in-channel treatment approaches. Highway and golf course runoff is of particular concern. Responsible agencies need to treat storm water runoff from highways prior to its reaching the river. Golf courses are traditionally maintained through intensive turf management. Course managers should be encouraged to create water quality buffers adjacent to the river and to implement sustainable management techniques that reduce the use of chemical based pest and weed control and fertilization.

FSDRIP Ponds

Riverwalk Golf Club

General Recommendations: Habitat and Wildlife

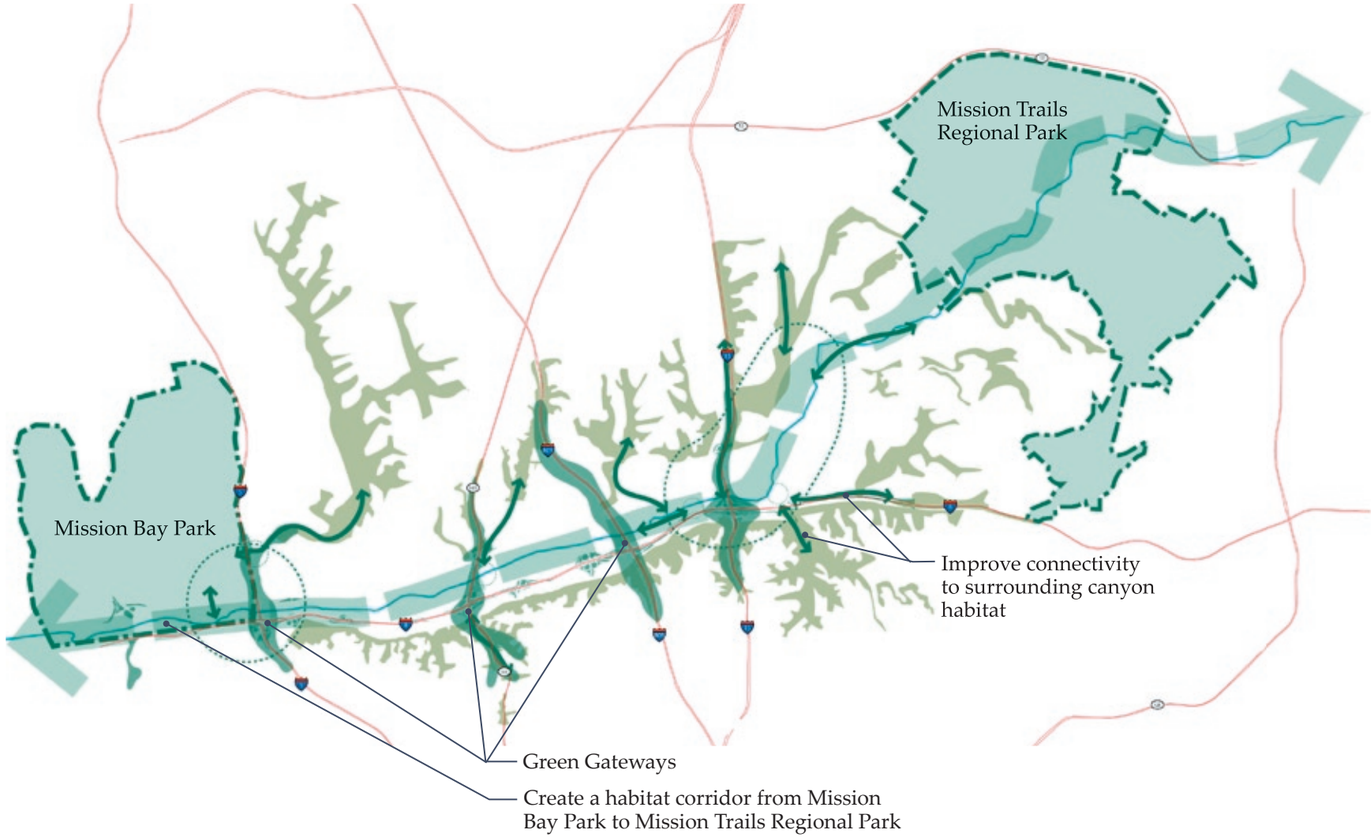
Intent

The San Diego River Park seeks enhanced connectivity on three primary levels. Linear connectivity along the river corridor allows animals, energy and nutrients to move more freely and extensively throughout the landscape system. Lateral connectivity between the river corridor and adjacent upland habitat areas is also important, reducing habitat fragmentation and allowing a natural progression of habitat types. Finally, connectivity between the river and its tributaries is vital to the health of the river, measured in water quality, and of the surrounding habitat.

Healthy and continuous native plant communities are essential to encouraging the movement and inhabitation of wildlife. Today the canyons, undeveloped slopes and upland spaces provide significant refuge for wildlife. Connecting these lands with the river valley creates the potential for wildlife movement between uplands and the river. Therefore the extent to which these uplands remain undeveloped is of benefit to the River Park. The objective is to create a continuous native riparian corridor along the river and a continuum of native plant communities from riparian to upland in the canyons. These corridors should be of sufficient width to encourage the presence of a variety of bird and animal species, and contribute to reducing the existing condition that isolates most canyons from the river.

An important step to enhance connectivity is to integrate both "infrastructure" and "ecostructure" to improve the connectivity of natural habitat. Infrastructure describes such services as transportation, utilities, and stormwater, while the term ecostructure encompasses rivers, vegetation, wildlife corridors and habitat.

To be included in this ecostructure designation, lands must meet two or more of the following conditions: be located within the San Diego River watershed, part of the river corridor/floodplain (as identified in the reach sections of this document), functioning natural habitat, designated park or open space or an easement. Generally, areas that meet more than one of these conditions are undevelopable because they flood regularly, present steep side slopes and canyons, or are areas designated for recreation, or conservation. As the last remnants of native habitat, these areas were identified as biologically significant and incorporated into the San Diego MSCP Subarea Plan.



Ecostructure of the San Diego River Park

Reduction, or loss of habitat and associated fragmentation are two of the biggest factors in the viability of habitat to continue to support wildlife, particularly in regard to the riparian, coastal sage scrub, and chaparral plant communities that comprise the majority of natural habitat in the study area. In urban areas, the existing habitat is limited to the immediate riparian corridor of the river, or fragmented and isolated upland habitat. Opportunities to increase habitat are limited, focusing San Diego River Park efforts on creating or improving habitat in places where it also improves connectivity between existing habitat areas is the key.

Recommendations

- Establish appropriate corridor widths to achieve objectives.
- Acquire open lands and pursue open space easements.
- Eliminate invasive plant species and reintroduce native species.
- Encourage multi-use redevelopment.
- Reclaim frontage roads as pedestrian and bicycle-only green buffers.
- Naturalize floodplain areas.
- Daylight the river's tributaries.
- Use biological systems to treat all stormwater before it enters the river.
- Separate pedestrian/wildlife and vehicular river crossings.
- Establish 'Green Gateways' as defined in this section.
- Establish habitat corridors as secondary gateways at side canyons and tributaries.
- Convert smaller, adjacent streets to 'Green Streets' as defined in this section.
- Provide interpretive information regarding natural systems and the rehabilitation of the river

Establish desirable and appropriate corridor width objectives

Water bodies and wildlife need 'breathing room' to maintain health and integrity. Open space corridors function as water quality buffers and as valuable habitat areas. Corridor widths must be determined based on available land and specific wildlife populations along each section of the river*.

An important element of establishing adequate corridors is encouraging development and redevelopment to take place an appropriate distance from the river's edge. This concept aligns with Army Corps of Engineers (ACOE) recommendations for floodplain management. The San Diego County Multiple Species Conservation Program (MSCP) Final Plan identifies the San Diego River valley as a habitat linkage from Mission Trails Regional Park to the ocean, and therefore the open space and habitat corridor should provide adequate space for wildlife movement. The presence of specific animal species is closely related to the width of the undisturbed open space available. The width also impacts whether the species inhabit or merely transit through the open space. Substantial wildlife habitat exists in Mission Trails Regional Park (MTRP) and in the canyons adjacent to the river valley. Maintaining corridors through the river valley will create a network of open space for habitat that will encourage wildlife movement through and residence within the valley. The objective is to preserve a wider optimum corridor in undeveloped land between Mission Trails Regional Park and Friars Road to create the potential for movement of larger wildlife from MTRP through the river valley and to Elanus Canyon above Admiral Baker Golf Course and back to MTRP. The river valley narrows and infrastructure impacts increase downstream of Friars Road, limiting the opportunity for larger animal species movement and residence of smaller species. The objective between Friars Road and Mission Valley Preserve is to preserve or create a continuous habitat corridor adequate to encourage movement and residence of smaller species. As the River Park Master Plan is implemented in specific areas within the valley, specific land development plans should be prepared to test the objectives for each site. The actual width of habitat corridors in various locations should be determined at the time of site specific planning and in conjunction with balancing the achievement of other objectives such as the quality and viability of private development, trail connections and other considerations. Refer to the Design Guidelines in the document for specific information regarding corridor objectives and recommendations.

**Studies of wildlife movement and resident populations (Integrated Natural Resources Management Plan for Marine Corps Air Station Mirimar) suggest that a corridor width of 300 feet is generally adequate to support resident species of birds and smaller mammals, while a corridor width of 500 feet is generally optimum to allow movement of larger mammals as well as increased resident populations of birds and small mammals. The City of San Diego Land Development Code - Biology Guidelines, Section III Biological Impact Analysis and Mitigation Procedures, recommends that areas of native vegetation that are less than 400 feet wide for a length greater than 500 feet are considered isolated (p. 21). The guidelines further reference the MSCP recommendation that at urban interface edge conditions widths should range from 200 to 600 feet depending on adjacent land uses (p. 21).*

Acquire open lands and pursue easements.

To expand, unify, and connect the river corridor, open space parcels or easements on private property should be acquired.

Eliminate invasive plant species, reintroduce native species and develop long-term management plans.

Floodplains recaptured in natural vegetation offer great promise in improving ecological function. Invasive, non-native plant species disrupt the balance and function of natural ecosystems, often choking out native species. The San Diego River Park planning process should coordinate with agencies, community groups and land owners to develop and implement vegetation management programs to remove exotic species and plant native riparian vegetation. Such plans should also consider Water Primrose, a native aquatic plant that requires management to control it spread. Special concern needs to be given to the timing of this work in order to minimize impacts to existing habitat, species, and wildlife use. On going management and maintenance is necessary to ensure establishment of native species and to prevent the return of invasive species. Programs should be developed to educate and coordinate vegetation management on both public and private lands.

Naturalize floodplain areas.

Naturalization should address both current and potential future hydrologic regimes. Similar to previously executed work in the Mission Valley Preserve, naturalization should consider the regrading of areas to create upland habitat adjacent to or in the floodplain and a continuous transition of native plant communities between the riparian corridor and upland habitat areas. A next step would use the naturalized floodplain areas to restore river channel dynamics to a more natural hydrologic regime. This naturalized regime would result in improved riparian habitat, particularly for listed species that depend on the river as an agent of disturbance in the floodplain.

Encourage multi-use redevelopment.

Development that can accommodate multiple uses, reduce the amount of land locked in development, and free more land for open space uses. By way of example, an under-utilized asphalt parking lot could be replaced with multi-function areas such as natural habitat areas, multi-use green space (recreation, temporary seasonal parking, etc.) for active and passive recreation.

Reclaim frontage roads as pedestrian and bicycle-only green buffers.

The San Diego River Park planning effort should examine existing frontage roads to assess daily traffic and availability of alternate routes. Where possible, little-used frontage roads, or segments of frontage roads, should be converted to green, vegetated buffers for non-motorized use.

Daylight the river and it's tributaries.

Many of the road crossings and tributaries of the San Diego River are contained in culverts, including Alvarado, Murray, Murphy and Ruffin creeks. Removing pipes, culverts and covered channels to expose the river to daylight combined with widening the channel and gently sloping the banks will reveal the true structure and pattern of the river, and support the naturalization of the floodplain and river corridor. Culverts should be replaced with bridges to reduce flow constraints, expand riparian habitat and encourage wildlife movement.

Use biological systems to treat all stormwater before it enters the river.

Biological treatment systems (constructed wetlands) provide water quality buffering that illustrates natural processes, provides wildlife habitat and maintains the character of the river corridor. This method of water filtering aligns with the Bureau of Reclamation Stormwater Treatment Program goals. Include interpretive signage to educate visitors about the value and function of such systems.

The San Diego River Park should also make stormwater treatment locations visible and educational features that interpret the day-to-day function and cycles of a river. Refer to Hydrology and Water Quality Recommendations.

Separate pedestrian/wildlife and vehicular river crossings.

San Diego River Park improvements should retrofit existing river crossing to allow grade-separated crossings for wildlife, San Diego River Park users, and vehicles. These bridges should address crossings at all scales, from trails to roads to highways. Pedestrian safety and continuity of pedestrian movement is improved by eliminating conflicts and interactions with vehicles. The construction and use of grade separated pedestrian passages is encouraged, such as the one under Friars Road at Fenton Marketplace. Similar passages should be created to improve pedestrian movement between the river valley and upland neighborhoods and canyons.

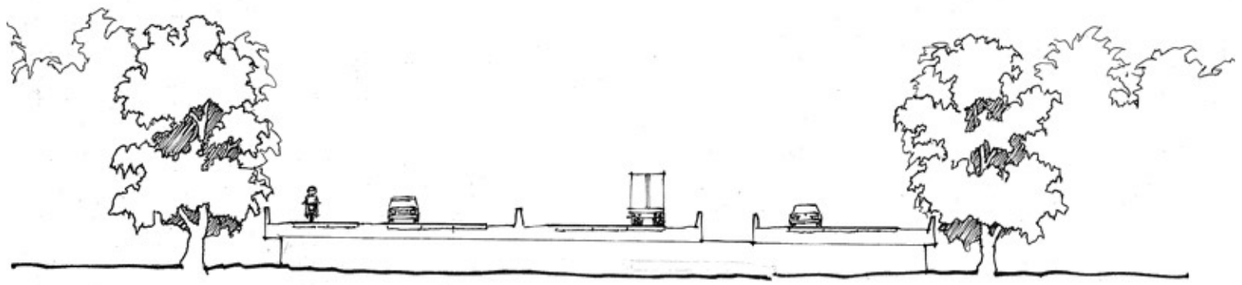
Tunnel under Friars Road provides a link between the valley floor and the valley wall and Ruffin Canyon

Establish 'Green Gateways.'

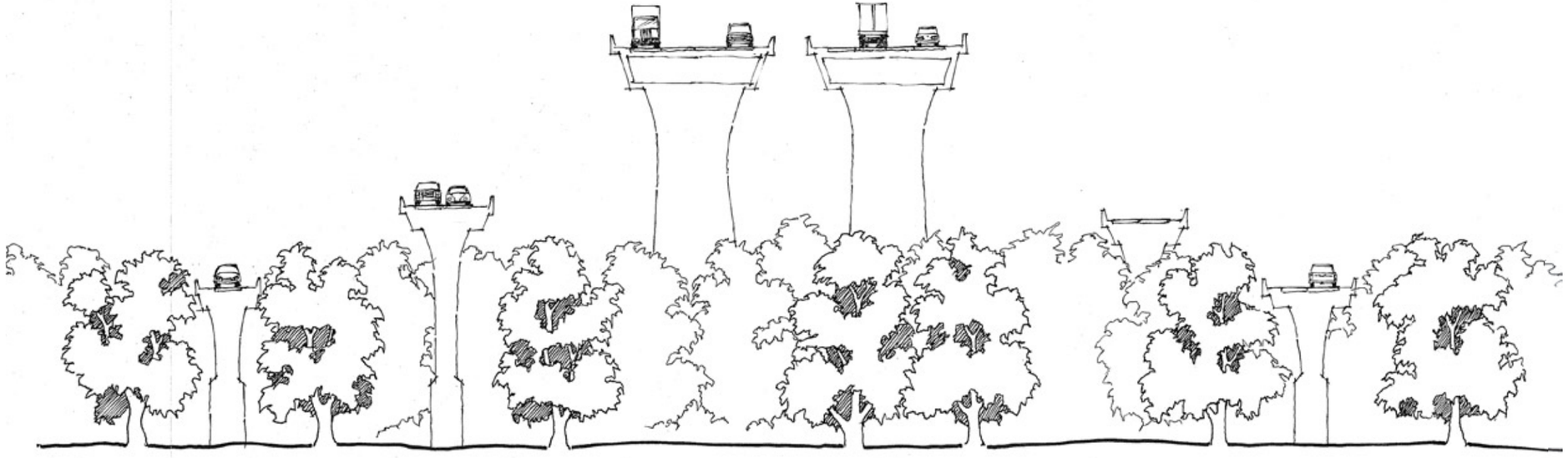
Green Gateways are key landscape elements located at the entries to and along the corridors through the San Diego River's domain. The gateways consist of large-scale plantings within public rights-of-way. Green Gateways create visual and functional connectivity to the San Diego River corridor and adjacent landscapes. Visually, these gateways mark the domain of the river corridor, providing a variety of view and access experiences. Depending upon each highway's elevation in relation to the ground plane of the valley bottom, the goal is to convey the sense of going "over", or "through", the riparian canopy of the river corridor. Visually, these gateways will counterbalance the overwhelming presence of the existing highway infrastructure. Functionally, these gateways will provide additional habitat and connectivity between the riparian corridor and adjacent upland areas.

The San Diego River Park should implement gateways at a range of scales, sized to fit the visual and functional needs of the connections being made. Large-scale gateways are appropriate at locations where highways such as I-5, SR-163, and I-15 cross the San Diego River Valley. I-805 offers a visual gateway to the valley below. These plantings include native trees and understory vegetation selected from the Native Plant Species Lists in Appendix i. Fremont Poplar *(Populus fremontii)* is recommended for this application; this species is a large, easily-recognizable tree that is a signature element of the region's riparian corridors. An iconic tree such as this one will emphasize river proximity. Open space parcels, whether acquired outright or through easements, that are contiguous with the gateways can contribute to and enhance their effect. These open space corridors will extend the native vegetation of the gateways.

Highway infrastructure and rights-of-ways consume much of the valleys and canyons



Section of the Cabrillo Freeway (SR-163) illustrating the "through gateway" experience as SR-163 crosses the San Diego River. There is a sense of enclosure and a cooler microclimate within the riparian forest canopy



Section of I-805 illustrating the "over gateway" experience as the highway crosses above the San Diego River. From above, the greenway makes the extent of the river's domain obvious to the motorist.

Establish habitat corridors as secondary gateways at side canyons and tributaries.

Habitat corridors can serve as smaller gateways into side canyons and tributaries. These gateways will also provide recreational and habitat connections to less-frequented areas of the San Diego River Park.

In some areas, development may make it difficult to meet the minimum corridor widths. In these cases, provide for as wide a corridor as feasible by establishing a recreational trail connection occupying or supplemented by open space easements.

Encourage Access for Traditional Activities

Maintain and encourage physical and visual access to the river wherever possible and where it can be accomplished without disturbance to wildlife habitat. In addition, maintain and encourage access to native vegetation in the river valley by Native American communities for collecting native plants for traditional uses such as basket weaving, etc.

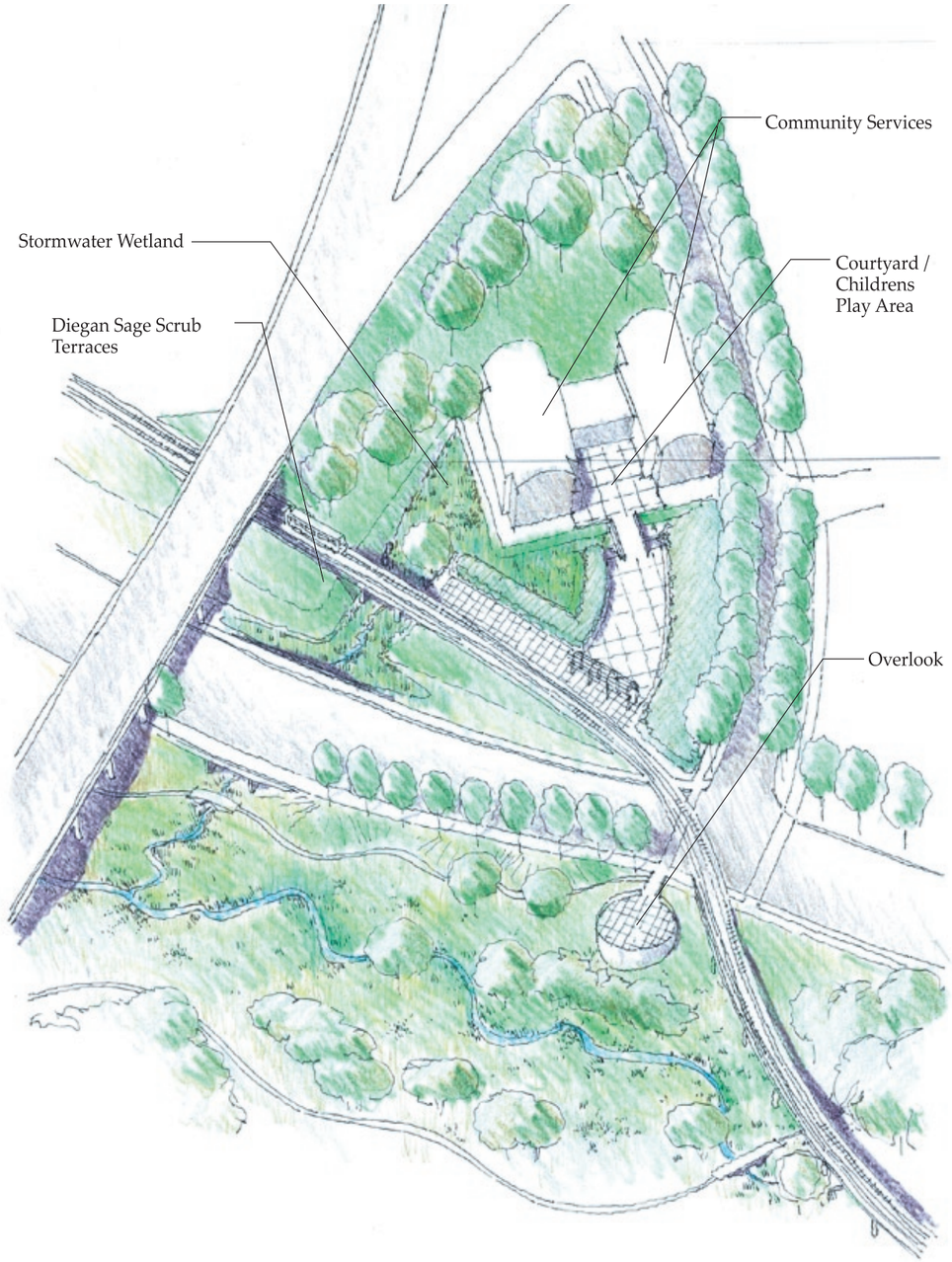
Convert smaller, adjacent streets to 'Green Streets.'

Green streets will offer open swale stormwater conveyance and have a tree canopy composed, in part, of native species. These green streets should extend north and south beyond I-8 and Friars Road to provide connectivity to adjacent communities and upland habitat.

Conceptual Model:

Public Infrastructure

As an example of building upon the public infrastructure, a trolley stop might function as a community focal point and interpretive site, as well as a connection to river park trails. This example is the type of idea that the San Diego River Park seeks to achieve.



An example of building on public infrastructure

General Recommendations: Recreation and Cultural Interpretation

Intent

The San Diego River Park Draft Master Plan proposes recreation facilities where the need exists, where such facilities would be accessible to the community and where recreational facilities would not require displacement of existing development. The proposed east-west multi-use trail, as well as connecting lateral bike paths and pedestrian trails, are proposed to link neighborhoods to new parks and regional recreation facilities. Interpretive areas and passive park uses are recommended where cultural and natural resources are most significant.

The San Diego River Park planning effort seeks to identify recreation needs and opportunities in the river corridor. Although the recommendations that follow focus on the one mile wide San Diego River Park planning corridor, existing facilities and recreation needs were examined within the fifteen adjacent community planning areas. According to Park & Recreation standards, many of the communities have major parkland deficits. Open, developable land for new parks is very limited throughout these communities. The river corridor is an appropriate place to provide additional recreation, given the valley's central location. As an added benefit, expanding park lands within the corridor can contribute to open space preservation.

This section discusses active and passive recreation. These recreational uses must be balanced with the protection of native habitat for wildlife. These will be places that encourage access to the river itself, for fishing and kayaking, and other places where human disturbance to habitat is discouraged. The San Diego River has been crucial to the settlement and culture of the San Diego Region. The River Park offers the opportunity to reconnect citizens with the river through education and interpretation, and by creating programs that will invite schools to visit the river and corridor and use its rehabilitation as an educational tool. Active recreation provides for activities such as sports facilities, fields, and open turf, while passive recreation provides for activities such as nature study, hiking trails, and interpretation of cultural sites. The River Valley also has many private facilities that offer commercial recreation, and the planning process must consider the relationship of those facilities to the San Diego River Park.

Recommendations

- Connect recreational experiences into a linear system
- Create connections from Ocean Beach to Santee
- Create waystations
- Upgrade and integrate existing parks into San Diego River Park system
- Explore opportunities for additional community- or neighborhood-scale park
- Integrate interpretation and education of ecology, history, culture and natural systems at every opportunity
- Create access to the river for fishing, bird watching, kayaking, canoeing and other water activities wherever possible.

The seven recreation recommendations listed above will tie the San Diego River Park together. These recommendations work together to provide a balance of community and neighborhood based facilities and to relate those facilities to regional open space and parklands. While the first two recommendations are broad in scope, the remaining recommendations are more site-specific.

Create a connected, linear recreational system

Reinforce the River Park with recreational and interpretive elements throughout the corridor's length. Land uses and character should be appropriate and sensitive to the river and to the surrounding neighborhood. Elements within individual parks along the San Diego River Park corridor will vary, depending upon exact location. This recommendation seeks to create green spaces and naturalized areas for informal use, adjacent to existing developments.

Dog Beach

Recreational and Interpretive Elements

- Pocket park sized play areas
- Waystations
- Interpretive areas
- Gathering places/amphitheatres/outdoor classrooms
- Refreshment facilities/Coffee Carts
- Interpretive loop trails
- Education/research sites
- Tree-shaded public parking (cars, motorcycles and bikes)
- Transit connections

Create connections from Ocean Beach to Santee

Organize an east-west multi-use trail from Mission Bay Park and Dog Beach to Mission Trails Regional Park. This trail is referred to in this document as the San Diego River Park Trail. The primary trail should be continuous, open to all non-motorized vehicles and pedestrian uses, and uninterrupted by conflicts with vehicles. Wherever possible, the trail should be paved. Paved trails of any kind are not allowed within Mission Trails Regional Park with the exception of the existing Father Junipero Serra Trail and Lake Murray path. However, alternative trail surface materials that harden and stabilize the tread, and work esthetically and environmentally with the surrounding landscape while meeting the needs of non-motorized vehicles, may be used with the approval of the Park and Recreation Department managing Mission Trails Regional Park. The use of such alternative materials also requires the concurrence of the Mission Trails Regional Park Citizens' Advisory Committee and Task Force. This multi-use trail should conform with the San Diego Bicycle Master Plan. Cases where conformance is not possible, or depart from design guidelines in favor of alternative options, are discussed later in this document, in the Specific Reach Recommendations section. Throughout the corridor, lateral connections to neighboring communities should be provided.

Path and Trail Elements

- Multi-use path on one side of the river only, except in Mission Trails Regional Park
- Unpaved pedestrian trail, generally on opposite side of the river from the multi-use trail, where appropriate
- Separate all portions of multi-use path from vehicular uses
- Above and/or below grade crossings at all intersections of the multi-use path with vehicular traffic
- Design guidelines for incorporating the multi-use path into future developments
- Lateral connections to neighborhoods:
  -Primary links: Morena Boulevard, Jackson Drive, Mission Gorge Road, Texas Street, Ulric Street
  -Secondary links: Princess View Drive, Tierrasanta Boulevard, Zion Avenue, Mission Village Drive, Mission Center Road and Bachman Place
- Connections to businesses and activity/shopping centers
- Connections to resource based parks: Balboa Park, Presidio Park, Mission Bay Park, and Mission Trails Regional Park

Create waystations

Waystations will offer stopping points along the river's length, or at nodes where a north-south connection to a community meets the San Diego River Park. Generally, waystations will be along a multi-use path or pedestrian trail, and will feature scenic views or interpretive opportunities. Waystations at new neighborhood parks, mini-parks and cultural resource areas will draw upon a common set of San Diego River Park building materials and graphics. Refer to the Design Guidelines section of this document for recommended materials.

Waystation Elements may include

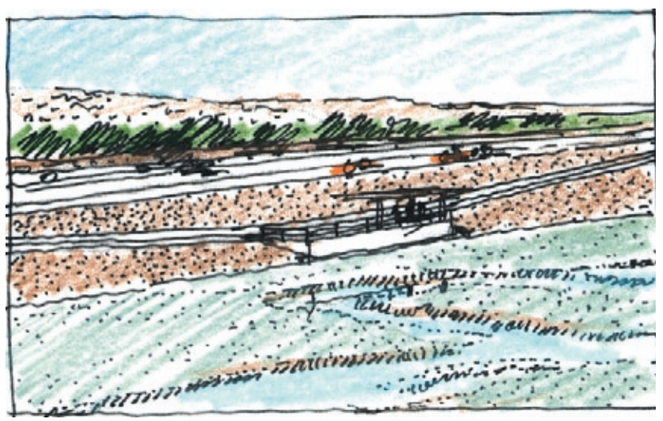
- Bike staging area
- Interpretive elements (natural science, history, culture)
- Kiosks/newsstands
- Parking
- Restrooms
- Links style golf (at Carlton Oaks)
- Naturalized areas with native plants
- Picnic areas
- Locations:
  Dog Beach (western portal)
  Carlton Oaks (eastern portal)
  various gateways, portals, nodes and interpretive areas

Integrate existing parks into the San Diego River Park system

The San Diego River Park is ultimately a linked series of parks and open space. Awareness of the river and the River Park should begin in existing parks that can be linked to the River park. Physical and conceptual elements of the San Diego River Park should be used in upgrades and renovations of existing parks. Establishing a set of materials that are evocative of and sensitive to the San Diego River will knit the system together, and is an overall goal of the San Diego River Park project. As parks are redeveloped, sensitivity to the river should guide design and material selection. Native planting areas should be expanded and impervious surface areas reduced. Refer to the Design Guidelines section of this document.

Parks

- Mission Bay Park
- Dog Beach
- Dusty Rhodes Park
- Robb Field
- Presidio Park
- Tecolote Canyon
- Ruffin Canyon
- Allied Gardens Park
- Rancho Mission Canyon Park
- Mission Trails Regional Park



Overlook platform at Estuary

Walkers along bikeway

Explore opportunities for community or neighborhood-scale park

The Mission Valley community requires 38 acres of recreational parks in order to be in compliance with the City of San Diego population-based goals for 2002. By 2020, it is estimated that this number will increase to 66 acres of parkland. Long-range San Diego River Park planning should address this issue so that if Qualcomm redevelops to 100%, San Diego River Park facilities would provide at least 60% of Mission Valley's required park area.

Create Multi-Use Paths and Pedestrian Trails

Bicycle paths are an important element of recreation and essential to the San Diego River Park. Paths provide an alternative to automobile travel, offering users a slower-paced and more direct experience. New paths proposed as part of the San Diego River Park Trail system will be paved, multi-use paths open to both bicycle and pedestrian use, secondary pedestrian trails, or hike/bike soft paved trails in Mission Trails Regional Park. Generally the multi-use path will link existing paved trails except in Mission Trails Regional Park where trails are unpaved other than Father Junipero Serra Trail. For this document, Class I Bikeways are per Caltran Highway Design Manual, and Multi-Use and Secondary Pedestrian Trails are defined as follows:

Class I Bikeway (Bike Path):
Provides a completely separated right of way for the exclusive use of bicycles and pedestrians with crossflow minimized. These are typically paved, have separate right-of-ways, and are mostly in parks, along rivers, beaches, and lakesides. Minimum turn radii and grade per standard.

Multi-Use Path:
8-12 feet wide paved concrete path with 2 foot wide gravel shoulders on each side. Minimum radii and grade per standards

Hike/Bike Trail:
Soft paved trail (gravel fines)
No minimum radii, alignment responds to natural conditions with no disturbance to existing vegetation and minimal grading.

San Diego River Park Trail in MTRP:
In accordance with MTRP standards

Secondary Pedestrian Trail:
5′ wide soft surface trail (gravel). No minimum radii, alignment responds to natural conditions with no disturbance to existing vegetation and minimal grading.

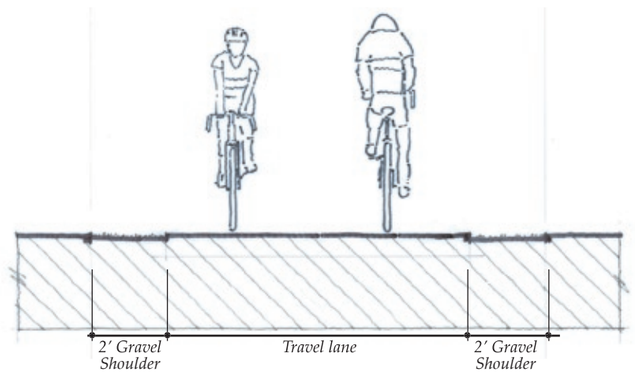
Various City plans and studies, listed below, were consulted for the multi-use path and trail component of this master plan. Assistance was received from City planners and the San Diego Bike Coalition.

- Plan Report - City of San Diego Bicycle Master Plan (2002, ALTA Transportation Consulting)
- Feasibility Study – Mission Valley Bikeway (2001, Kimley-Horn and Associates)
- Qualcomm Stadium / Zion Avenue Bikeway Feasibility Study (2001, Rick Engineering)
- San Diego River Bikeway Feasibility Study (2000, Linscott Law & Greenspan Engineers)
- San Diego County Transportation Plan
- Color-coded Mission Valley Community Plan with Existing/ Proposed Bikeways & pedestrian Paths (2004, John Wilhoit, City of San Diego).

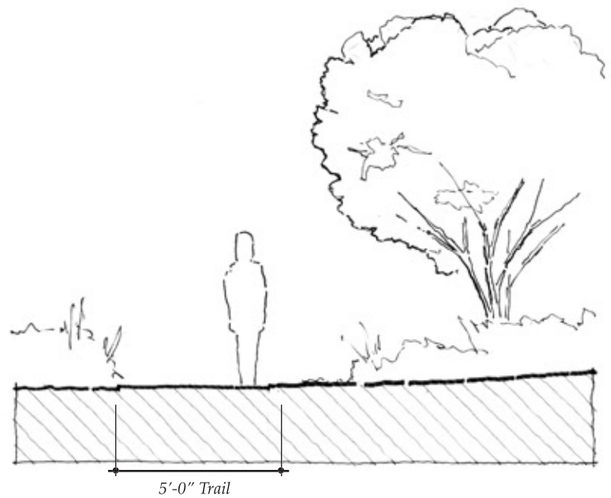
There are several bike paths in the San Diego River Park that are part of the multi-use path system separated from vehicular circulation and shared with pedestrians. Common goals shared between this master plan, the 2002 City of San Diego Bicycle Master Plan, and the community plans are as follow:

- Continuous bike path from Ocean Beach, through Mission Valley and to Mission Trails Regional Park – along the San Diego River
- Connection to Mission Bay
- Connection to Mission Hills
- Connections to activity centers in Mission Valley
- Bicycle sensitive signal detectors at signalized intersections
- Above-grade crossings at key vehicular/multi-use path conflicts
- Connection to city of Santee trail system

For more info:
http://www.dot.ca.gov/hq/oppd/hdm/hdmtoc.htm#download



Multi-Use Trail



Secondary Pedestrian Trail

General Recommendations: Public Art Recommendations

Intent

Public art has a potent role in bringing life to the San Diego River Park. The diversity of history and culture in the San Diego region and specifically in the San Diego River Valley offers a tremendous opportunity to engage the community with the experience of the river. Public art should integrate with cultural and natural systems, interpret the river and its ecosystems and build upon the specific circumstances of the diverse environments along the river corridor. The City of San Diego has adopted a public art policy that promotes artist involvement in selected City design and construction projects. Such involvement is encouraged with all projects associated with the San Diego River Park.

Recommendations

- Create identity with art
- Integrate art that interprets the river into the San Diego River Park experience
- Include artists in the design process and provide for an artist in residence program
- Make art accessible to everyone

Create identity with art.

San Diego River Park Trail System

At every opportunity, art should be incorporated into the San Diego River Park Trail. Art elements should be a component of trail access points, interpretive areas and signage, fountains where appropriate, fencing, furnishings and in the paving texture and color of the trail itself at locations of significance such as intersections, street crossings and entrances.

"Alvarado Gardens"
Artist: Robert Millar

Integrate art into the San Diego River Park experience.

Public Art in Parks and Open Space

Art should play a role in the design of parks and natural open space. In parks, art elements should be incorporated into entrances, furnishings, lighting, fencing, interpretive areas and signage, as interactive elements and as sculpture. In natural areas, a sense of design should be incorporated with the science of ecological restoration of native habitat to create identifiable and memorable places, as the form can add richness and understanding of how the natural systems function. In addition, art should be incorporated into the interpretation of the systems.

Include artists in the design process.

Public Art in Public Projects

In projects initiated by public entities, art and artists should be involved in a significant role to contribute to the project design. An artist in residence program could create the opportunity for an individual artist to focus on the river for an extended period of time, creating art that interprets the river and offering the potential opportunity to teach, interact with schools, and to actively engage people with art and the river.

"Snake Path"
Alexis Smith

Make art accessible to everyone.

Public Art in Private Development

Incorporation of publicly accessible art on private projects should be supported and encouraged. The City of San Diego Commission for Arts and Culture may serve as source of information for means and methods of incorporating art into specific projects and for the selection of specific artists.

"Urban Tree's"
Photo Courtesy Dale Frost, Port of San Diego

Reach Recommendations

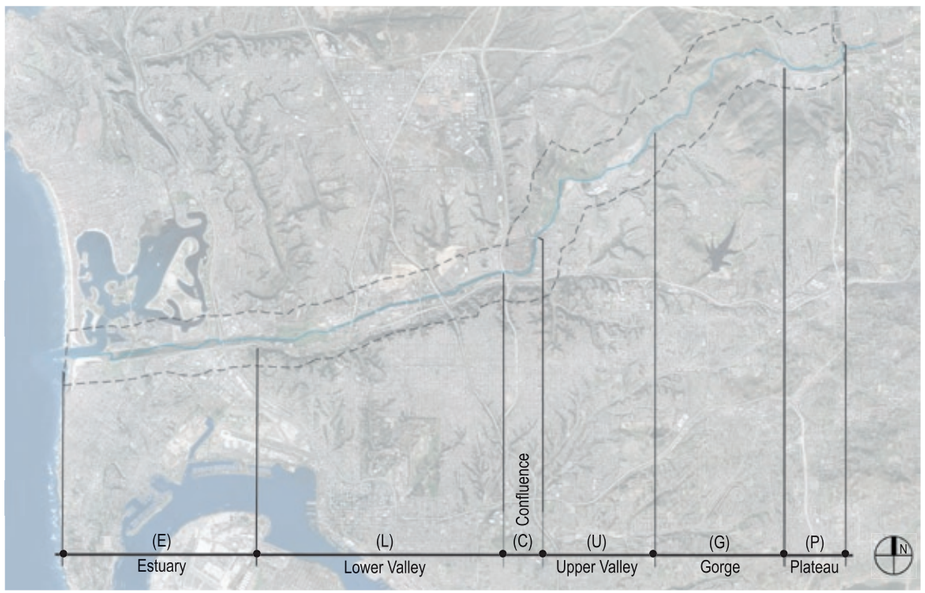
Specific Reach Recommendations

The San Diego River can be understood as a linked series of discrete reaches. The unique characteristics and opportunities of each reach suggests an approach that reveals their best qualities and showcases the changing visual and physical experience as one moves through the valley.

Within the City of San Diego, the Plan identifies six reaches. Traditionally distinguished by hydrologic characteristics, these reaches are based upon distinct topographic condition, spatial experience and/or land use. Following the flow of water from the hills to the ocean, the reaches are the Plateau, the Gorge, Upper Mission Valley, the Confluence, Lower Mission Valley, and the Estuary. Specific actions needed to create the River Park are identified in each reach.

The pages that follow outline intent, condition and recommendations for each reach. The intent describes the Plan's specific goals for the reach, followed by an assessment of it's current conditions. The recommendations outline the broad strokes of the Plan for the reach. Where appropriate, key sites are identified where special opportunities exist or conditions and location define the site as a critical component of the River Park. This 3-part overview is followed by a map of the reach and a table of specific action items and their proposed implementation.

The benefits to hydrology, ecology, recreation and education of each action are described in detail in the matrices located in the appendices



Six Reaches

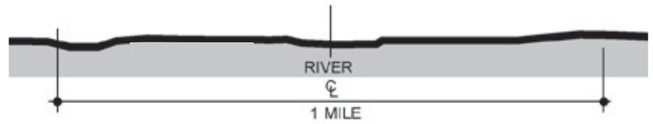
Estuary

Lower Valley

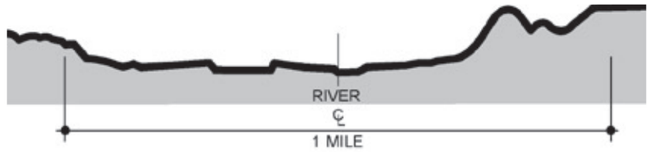
Upper Valley

Gorge

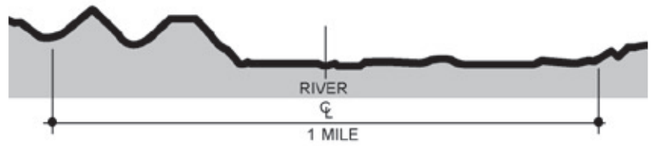
Plateau



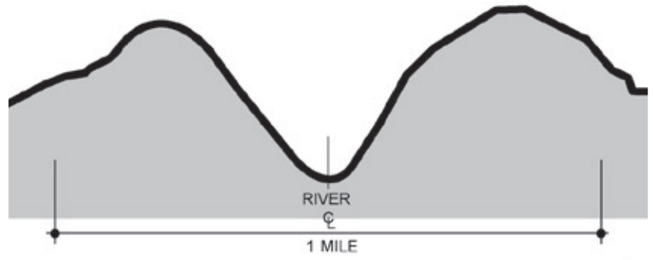
Estuary



Lower Valley



Upper Valley



Gorge

Plateau

Typical Cross Sections of Reaches

Estuary

Intent: Extending from Mission Valley Preserve to the Pacific Ocean, the Estuary reach offers an astonishing sense of openness, and a sense of release as one moves past the Linda Vista Terrace topped by the University of San Diego and Presidio Park. Only here and at the Plateau above Mission Trails Regional Park does the San Diego River Park have the potential to capitalize on long, picturesque views and the experience of vast, open space. In the Estuary reach, the San Diego River Park must strive to build upon this experience, and to protect and expand the unique wildlife habitats of the estuarine ecosystem. The San Diego River Park should also seek to educate visitors about the sensitivity of these ecosystems.

Condition: The estuarine ecosystem at the mouth of the San Diego River is remarkably healthy, but significantly smaller than its original extent. The Derby Dike on the river's southern edge is responsible for this reduction in scale, separating the river from its delta that historically (and alternately) included both Mission Bay and San Diego Bay. The dike has also restricted and concentrated pedestrian and vehicle circulation, resulting in heavy containment of boundaries to the river channel.

The estuary supports rich avian and aquatic species

The multiple crossings of Interstate 5, Mission Bay Drive and the railroad have had additional impacts on the estuary, creating an abrupt terminus and disrupting the gentle transition from estuarine to riparian habitat. The tremendous experience of boundlessness once expressed by the estuary and shoreline is now limited by views of development, the dikes, and by highways containing the river. Despite these alterations, the Estuary remains an expansive environment defined by horizontality.

The estuary includes, or is adjacent to several significant existing parks and open spaces including Mission Bay Park, Dog Beach, Robb Field, Southern Wildlife Preserve, Famosa Slough and Mission Valley Preserve.

Diverse estuarine vegetation

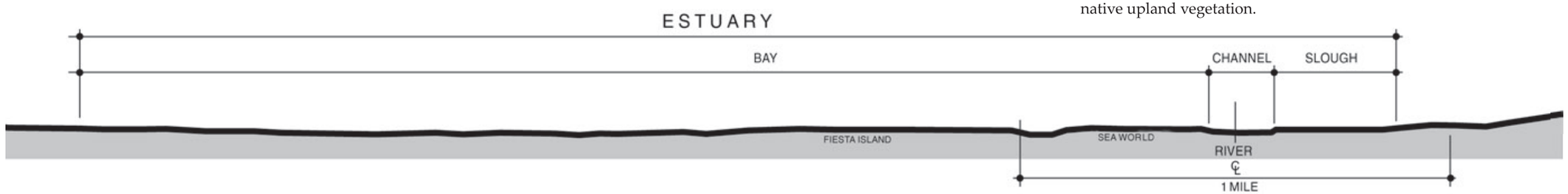
Recommendations:

- Support the goals of Mission Bay Park, Dog Beach, Robb Field, Famosa Slough, Southern Wildlife Preserve and Mission Valley Preserve
- Create a continuous multi-use trail
- Improve connections to other open spaces
- Establish a minimum open space corridor equal to present dimensions of dike.
- Create passive component at Mission Bay Park
- Study potential to improve ecologic and possibly hydrologic connection with Mission Bay Park

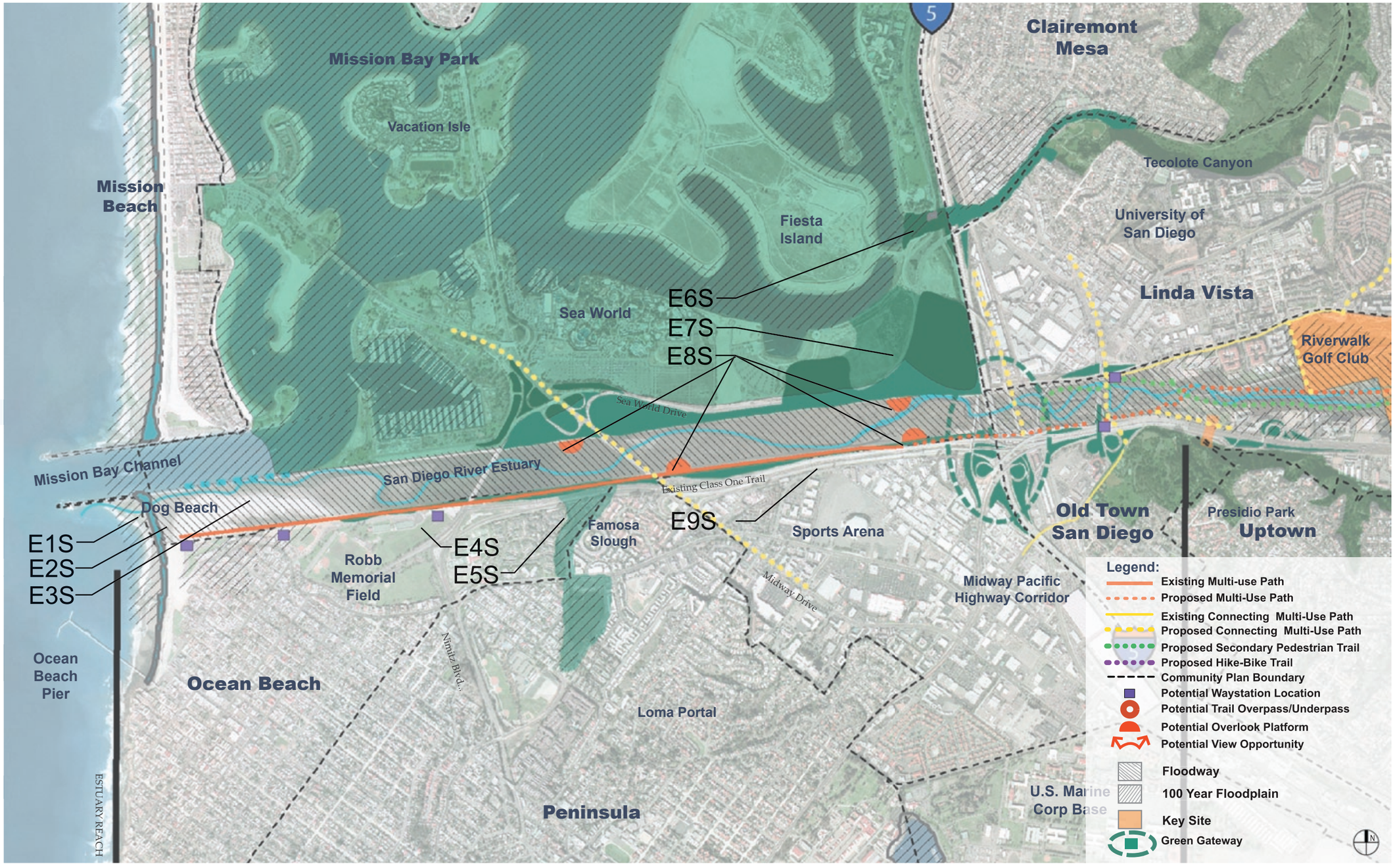
The Estuary Reach of the San Diego River Park must balance two primary needs: human interaction at an educational & experiential level and the protection and maintenance of sensitive habitat. Careful design can accommodate both elements in a manner that benefits the system as a whole. People must be both engaged and isolated within the estuary reach. Greater understanding of the ecosystem through interpretation will instill a sense of ownership and care for this delicate part of the river. A defined trail system and viewing platforms are part of this effort.

A collaborative planning process with Mission Bay Park should also seek to expand the physical area of the estuary, in order to further diversify the wildlife habitat. This potential may exist at Famosa Slough and Mission Bay. Opportunities to explore the expansion of the estuary should be sought where possible, to further diversify the wildlife habitat. The potential to do so may exist at Famosa Slough and at Mission Bay. Planning efforts should also acknowledge that in the Estuary Reach, the entire corridor, proposed for the San Diego River Park, is within the boundaries of Mission Bay Park. Planning must integrate with and support the Mission Bay Park Master Plan.

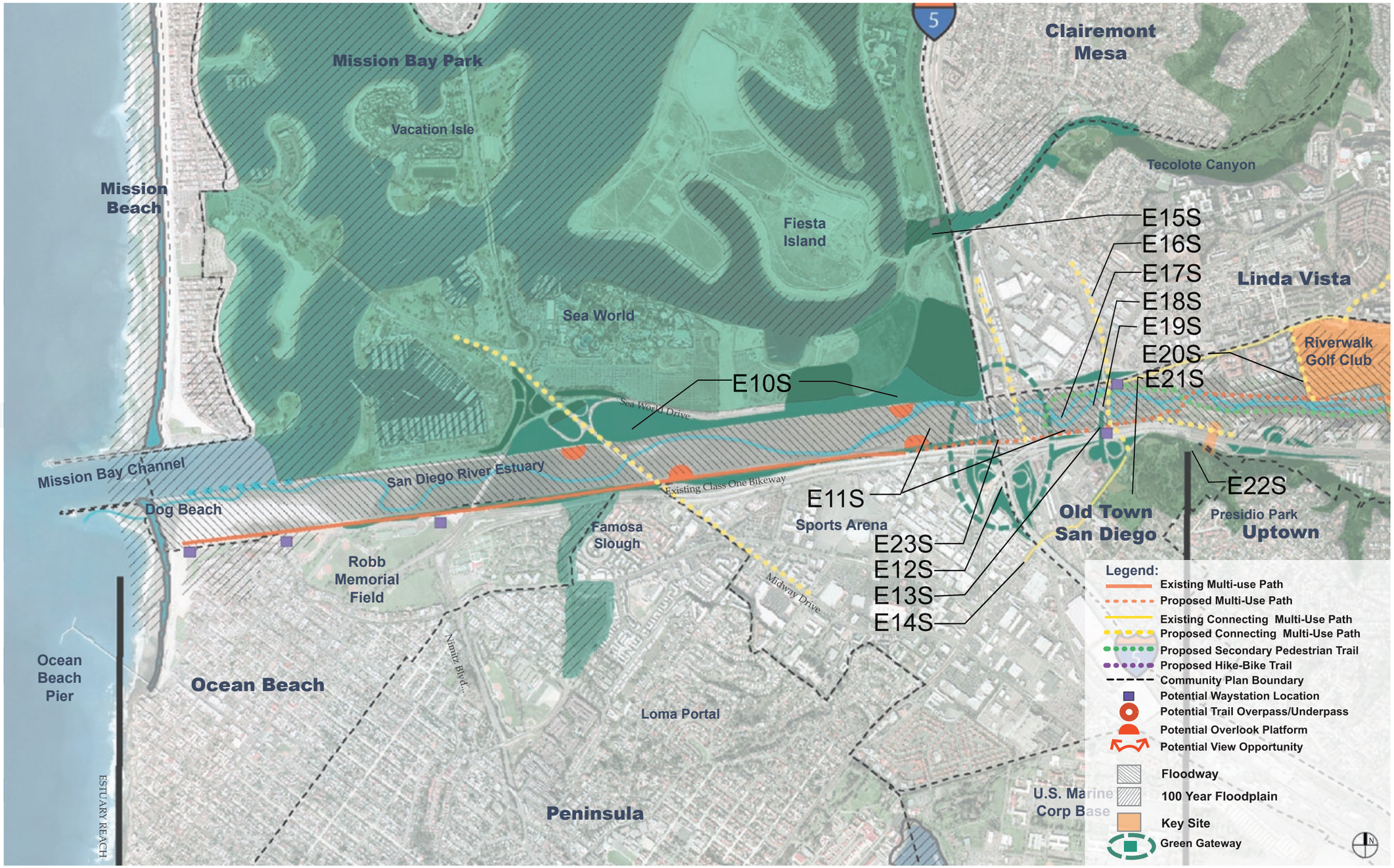
The River Park must Support planning efforts in Mission Bay Park to provide a passive, ecology-based facility, which includes educational and interpretive opportunities, public art, and scenic overlooks. The Park should orient itself toward the river, and buffer the river edge with native upland vegetation.



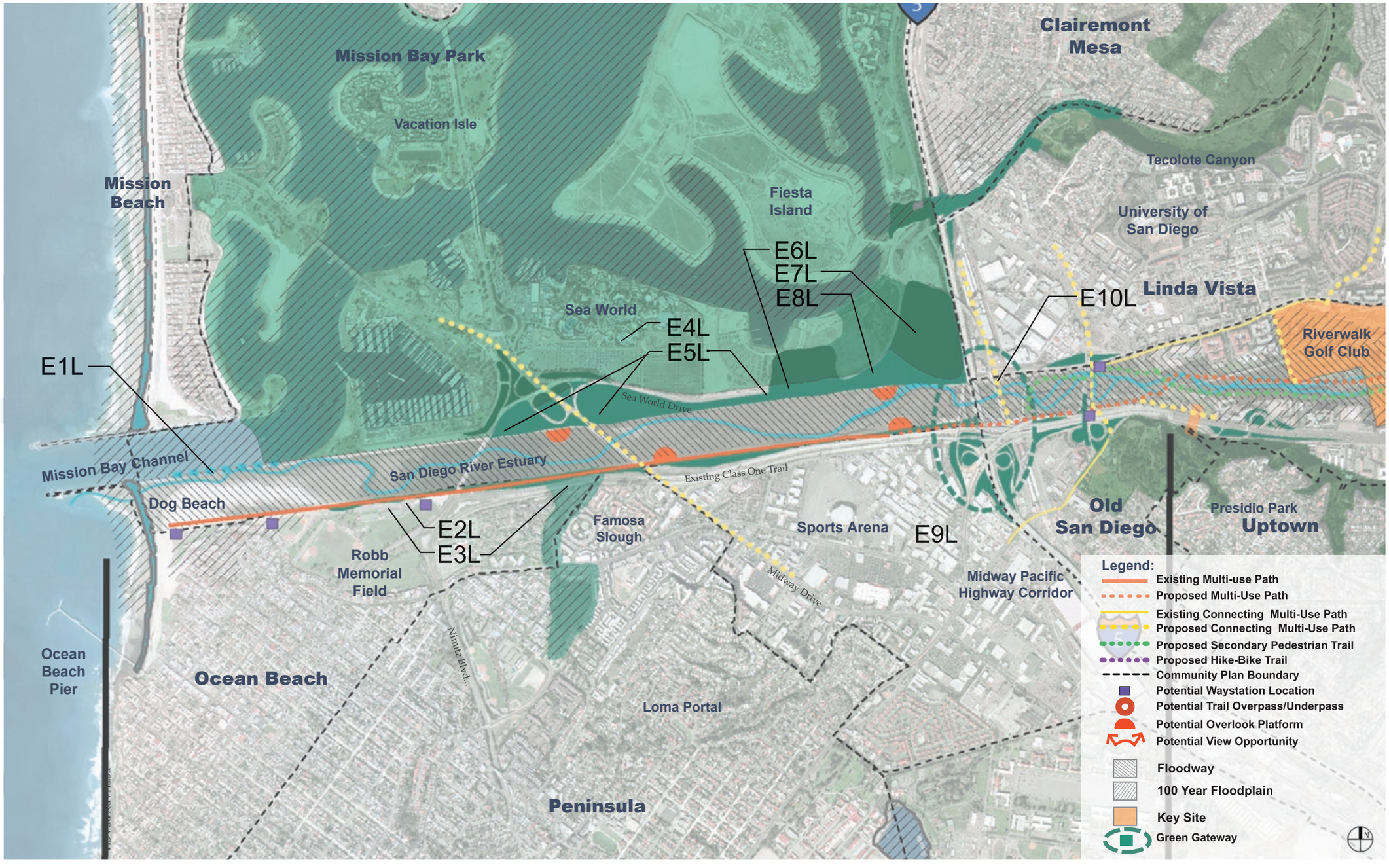
Estuary Reach Section


Mission Bay Park
Vacation Isle
Mission Beach
Clairemont Mesa
Tecolote Canyon
University of San Diego
Fiesta Island
Linda Vista
Sea World
E6S
E7S
E8S
Riverwalk Golf Club
Sea World Drive
Mission Bay Channel
San Diego River Estuary
Existing Class One Trail
Dog Beach
E1S
E2S
E3S
E4S
E5S
E9S
Famosa Slough
Sports Arena
Old Town San Diego
Presidio Park
Uptown
Robb Memorial Field
Midway Pacific Highway Corridor
Midway Drive
Nimitz Blvd.
Ocean Beach Pier
Ocean Beach
Loma Portal
Peninsula
U.S. Marine Corp Base
ESTUARY REACH
Legend:
Existing Multi-use Path
Proposed Multi-Use Path
Existing Connecting Multi-Use Path
Proposed Connecting Multi-Use Path
Proposed Secondary Pedestrian Trail
Proposed Hike-Bike Trail
Community Plan Boundary
Potential Waystation Location
Potential Trail Overpass/Underpass
Potential Overlook Platform
Potential View Opportunity
Floodway
100 Year Floodplain
Key Site
Green Gateway

KEYNOTE	RECOMMENDATION	IMPLEMENTATION	BENEFITS			
Short Term			HYDROLOGY	ECOLOGY	RECREATION	EDUCATION
E1S	Create San Diego River Park Trail trail head and waystation at Dog Beach.	Collaborate with appropriate community and special interest groups to install signage, interpretive kiosks and furnishings in vicinity to provide information about estuarine function, wildlife habitat and trail system. Throughout the San Diego River Park, signage, kiosks, and furnishings should be unified by a continuity of materials and graphics while also incorporating materials that reflect the adjacent environment and neighborhoods. Link trail head and Waystation to existing bike lanes, bike routes, and trails in surrounding communities.	●	●	●	
E2S	Maintain Dog Beach as an off-leash recreational destination and community asset. Enhance existing Dog Beach signage to include information about the San Diego River Park.	Support appropriate community and special interest groups to manage Dog Beach and integrate it with the San Diego River Park.			●	
E3S	Coordinate with Mission Bay Park to support marsh restoration that is underway.	Collaborate with appropriate community groups to install signage in vicinity to provide information and create awareness about estuary function and wildlife habitat.		●		●
E4S	Create San Diego River Park Trail head and waystation and historic and natural interpretation zone at Robb Field.	Collaborate with appropriate community and special interest groups to install signage, interpretive kiosks and furnishings in vicinity to provide information. Coordinate with Community Plans in future to integrate park and river trail. Unify interpretive signage, furnishings, and construction with other San Diego River Park projects. Maintain Robb Field as multi-use recreational complex, and expand in future as community recreation needs increase.			●	●
E5S	Explore potential to improve and expand connection of the Famosa Slough with the San Diego River estuary. Investigate feasibility of augmenting the connection with appropriate engineering study. Potential conflict with Famosa Slough Master Plan.	Collaborate with appropriate community and special interest groups including friends of Famosa Slough to initiate feasibility study to explore benefits and impacts of replacing existing culvert with larger structure and improve trail connectivity between the San Diego River Park Trail and Famosa Slough. Consider linking existing Famosa Slough trail with the existing Class I Bike Path. Increase passive park areas into new river alignment and/or new link with Famosa Slough.	●	●	●	●
E6S	Coordinate with Mission Bay Master Plan to consider modifications to Mission Bay and Tecolote Treatment Wetlands Plan.	Collaborate with appropriate community and special interest groups to extend feasibility study to explore the potential to modify current plan to consider effect of improving the hydrologic systems of Mission Bay and the River. Such a study should identify and develop trail connections from the San Diego River Park to Tecolote Canyon and with Mission Bay Park.	●	●		
E7S	Develop temporary multi-use programs for under-utilized lands that are proposed for other future uses.	Collaborate with appropriate community and special interest groups to explore opportunities to fully utilize land for ecologic, educational and recreational uses.		●	●	
E8S	Create estuary overlook platforms along the San Diego River Park Trail at estuary surface level.	Collaborate with appropriate community and special interest groups to develop, design, and select specific locations for interpretive overlooks on both the north and south sides of the San Diego River estuary.			●	●
E9S	Explore potential to create a new park with a recreational connection to the river and neighborhood as the Sports Arena redevelops. If possible, expand river into this area similar to Famosa Slough.	Collaborate with North Bay Redevelopment Plan to integrate its recommendations with the San Diego River Park. If the Sports Arena redevelopment plans move forward, seek opportunities to engage with the process to integrate those plans with the River Park by creating trail connections, installing interpretive kiosks, and potentially a Community Park.		●	●	


Mission Bay Park
Vacation Isle
Clairemont Mesa
Mission Beach
Tecolote Canyon
Fiesta Island
E15S
E16S
E17S
E18S
E19S
E20S
E21S
Linda Vista
Sea World
Riverwalk Golf Club
E10S
Sea World Drive
Mission Bay Channel
San Diego River Estuary
Existing Class One Bikeway
E11S
Sports Arena
E22S
Presidio Park
Uptown
Old Town San Diego
Dog Beach
Famosa Slough
E23S
E12S
E13S
E14S
Robb Memorial Field
Midway Drive
Nimitz Blvd...
Ocean Beach Pier
Ocean Beach
Loma Portal
U.S. Marine Corp Base
Peninsula
ESTUARY REACH
Legend:
Existing Multi-use Path
Proposed Multi-Use Path
Existing Connecting Multi-Use Path
Proposed Connecting Multi-Use Path
Proposed Secondary Pedestrian Trail
Proposed Hike-Bike Trail
Community Plan Boundary
Potential Waystation Location
Potential Trail Overpass/Underpass
Potential Overlook Platform
Potential View Opportunity
Floodway
100 Year Floodplain
Key Site
Green Gateway
N

KEYNOTE	RECOMMENDATION	IMPLEMENTATION STRATEGY	BENEFITS			
Short Term			HYDROLOGY	ECOLOGY	RECREATION	EDUCATION
E10S	Mission Bay Park interface zone.	Coordinate with appropriate community/special interest groups for the Mission Bay Park Master Plan and South Shores General Development Plan to ensure appropriate park and river interaction and possible interpretive opportunities.			●	●
E11S	Continue San Diego River Park multi-use path east of the I-5 and create connections from Friars Road to Pacific Highway.	Coordinate with community plans, North Bay Redevelopment Plan and San Diego Bicycle Master Plan.			●	
E12S	Establish Green Gateway at interchange of I-5 / I-8.	Initiate dialogue with Caltrans, the City of San Diego and appropriate community/ special interest groups. Plans to explore the methods for implementing native plant palette in rights-of-ways. Where appropriate, identify existing undeveloped parcels contiguous with rights-of-way and explore potential to acquire or establish open space easements to expand connectivity of Green Gateways.		●		
E13S	Create a waystation, trail connection and naturalized open space between Presidio Park and Old Town San Diego and the river corridor.	Prepare detailed design study for locating waystations, trail connections, bicycle staging areas and explore the creation of shuttle links from the trolley at Old Town San Diego/Linda Vista to Ocean Beach, Sea World and Mission Beach. Initiate dialogue with Transportation Department to create shuttle links from trolley at Old Town/ Linda Vista and Ocean Beach/ Sea World/ Mission Beach.		●	●	●
E14S	Create recreational trail connection between the San Diego River Park and the San Diego Bay.	Implement Class 2 and Class 3 Bikeways along Rosecrans Street and Taylor Streets as proposed by the Plan Report City of San Diego Bicycle Master Plan			●	
E15S	Improve trail and open space connection between Tecolote Canyon and Mission Bay.	Explore potential to reconstruct I-5 and railroad crossings over Tecolote Creek with larger bridges or culverts that can accommodate pedestrian movement. Consider multi-use path adjacent to riparian channel, and link to proposed City of San Diego Bicycle Master Plan recommended Class I Bike Path adjacent to railroad right-of-way.	●	●	●	
E16S	Create connection between the San Diego River Park and adjacent neighborhoods to the north, providing trail connection, way station and study possible interpretive opportunities.	Coordinate with San Diego Bicycle Master Plan and appropriate community/ special interest groups to develop detailed study to confirm specific alignment. Implement Bikeway along Moreno Boulevard to Taylor Street as proposed by the City of San Diego Bicycle Master Plan. Improve connection of existing Class I Bike Path (from East Mission Bay Drive to Fashion Valley Road) to Morena Boulevard and to Morena Linda Vista Trolley Station. Coordinate with Mission Valley Community Plan to include in update as amendment.			●	
E17S	Broaden river channel, meander, and potentially braiding of river through Mission Valley Preserve.	Collaborate with appropriate agencies and community/special interest groups to prepare specific plans and identify funding sources to modify river channel.	●	●	●	●
E18S	Connect Morena Boulevard Bikeway and proposed new segment of San Diego River Park trail.	Coordinate with San Diego Bicycle Master Plan. Study feasibility of connecting (future) Morena Boulevard bridge Bikeway (per Plan Report City of San Diego Bicycle Master Plan) and proposed San Diego River Park multi-use trail at south edge of Morena Blvd. bridge. The Bikeway is at street level; the multi-use trail is down in the river valley.			●	
E19S	Support and build upon access and interpretation zone at Mission Valley Preserve.	As San Diego River Park Trail is implemented, develop trail head with signage, interpretive kiosks and furnishings.			●	●
E20S	Create short term bike trail alignments through Riverwalk Golf Club in trolley right-of-way.	Coordinate with the appropriate agency, community/special interest groups, land owners and golf course management to explore the potential bike trail. Trail would be relocated closer to river channel in the future when the golf course redevelops.			●	
E21S	Support efforts to create a Presidio Park Master Plan.	Coordinate with appropriate agencies, community and special interest groups to begin discussions about initiating a master planning effort and to identify potential funding sources.			●	●
E22S	Create a Presidio Park entry monument on Taylor Street that incorporates its historic connection with the river.	Coordinate with appropriate agencies and community groups to initiate study to design and locate entry signage on north side of Presidio Park.				●
E23S	Remove 1.5 acre area of cobble fill on south side of river under I-5.	Identify potential donors or funding sources to remove fill and lower grade to river channel level. Fill could potentially be used to fill undesirable ponds upstream or may have value as structural fill for development projects elsewhere.	●	●		


Mission Bay Park
Vacation Isle
Clairemont Mesa
Tecolote Canyon
Mission Beach
Fiesta Island
University of San Diego
E6L
E7L
E8L
E10L
Linda Vista
Sea World
E4L
E5L
Riverwalk Golf Club
E1L
Sea World Drive
Mission Bay Channel
San Diego River Estuary
Existing Class One Trail
Dog Beach
E2L
E3L
Famosa Slough
Sports Arena
E9L
Old San Diego
Presidio Park
Uptown
Robb Memorial Field
Midway Drive
Midway Pacific Highway Corridor
Ocean Beach Pier
Ocean Beach
Nimitz Blvd.
Loma Portal
Peninsula
Legend:
Existing Multi-use Path
Proposed Multi-Use Path
Existing Connecting Multi-Use Path
Proposed Connecting Multi-Use Path
Proposed Secondary Pedestrian Trail
Proposed Hike-Bike Trail
Community Plan Boundary
Potential Waystation Location
Potential Trail Overpass/Underpass
Potential Overlook Platform
Potential View Opportunity
Floodway
100 Year Floodplain
Key Site
Green Gateway

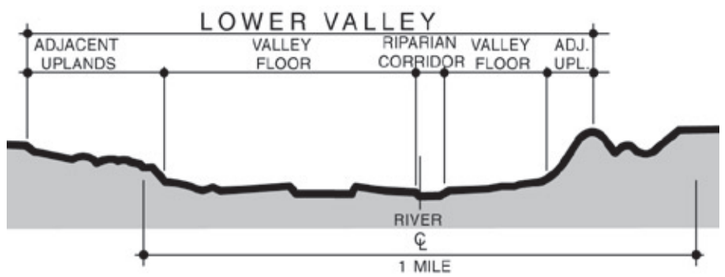
KEYNOTE	RECOMMENDATION	IMPLEMENTATION	BENEFITS			
Long Term			HYDROLOGY	ECOLOGY	RECREATION	EDUCATION
E1L	Explore potential to remove lowered portion of jetty wall. Although not consistent with Mission Bay Master Plan, removal of this barrier has the potential to better integrate the hydrologic function of bay and river.	Suggested for feasibility study purposes only. Collaborate with appropriate community and special interest groups to initiate a feasibility study to explore the benefits and impacts of removing the jetty through hydrologic modeling and other methods. Potential to develop study through a joint science program related to the San Diego River.	●	●		●
E2L	As Robb Field is improved in the future, create a landscape that relates to estuary and river edge.	Coordinate with appropriate agencies and community/special interest group plans for future improvements.		●		
E3L	Explore potential to realign and terrace south river edge and expand estuary. These areas serve as refuge for wildlife and as seed sources for native re-vegetation in the event of major floods	Collaborate with appropriate community and special interest groups to initiate feasibility study to modify the river channel embankment to create a varied edge with native vegetation.	●	●	●	
E4L	As Sea World may evolve in the future, encourage redevelopment that engages San Diego River Park and estuary and creates trail connection to San Diego River Park Trail.	Collaborate with Sea World to engage in their planning process to create awareness of the goals of the San Diego River Park. Encourage better connections and access, use of native vegetation, education about the river, and integration of Sea World as one of the linked amenities of the San Diego River Park.		●	●	
E5L	Explore potential to realign and terrace north river edge and expand estuary.	Collaborate with appropriate community and special interest groups to initiate feasibility study to modify the river channel embankment to create a varied edge with native vegetation.	●	●	●	
E6L	If results of feasibility study proposed in short term recommendations are positive, implement improvements to estuary between Mission Bay and the San Diego River.	Collaborate with appropriate agencies and community/special interest groups to prepare specific plan and identify funding sources to improve estuarine environment.	●	●	●	●
E7L	Investigate potential for locating a River and Estuary Interpretive Center that supports the Mission Bay Park Master Plan interpretive program.	Initiate dialogue with appropriate community and special interest groups to explore potential to consider another location for the Nature Center or to develop an additional Interpretive Center associated with the river and estuary.		●		●
E8L	Collaborate with Mission Bay and Land Fill Study to explore the potential to expand estuary.	Collaborate with appropriate agencies and community/special interest groups to initiate feasibility study to create an estuarine link between Mission Bay and the San Diego River. Extensive study and modeling will be required to fully understand the impact of linking the River and the Bay on flows and water quality. Engage the Mission Bay Landfill Study in the process. Could be explored through a joint science coalition.	●	●		●
E9L	Explore potential to create a greenway connection with San Diego Bay.	Collaborate with North Bay Redevelopment as it evolves.			●	●
E10L	Create major San Diego River Park access node at Linda Vista and integrate with potential Green Gateway at I-5 and Friars Road.	Coordinate with Community Plans to identify sites and land owners to explore potential acquisition or to establish easements for access and interpretive trail head locations.		●	●	

Lower Valley

Intent: The Lower Valley extends from the eastern edge of Mission Valley Preserve to Interstate 15. The valley has developed intensely since WWII, and is arguably the most altered section of the river. It is also the most complex.

The Lower Valley segment of the San Diego River Park can serve many roles: a focal point for new development and re-development, a link between adjacent uses (stadium, hotels, shopping, library, food and drink) and a common space for neighboring communities. The San Diego River Park may take on its most urban character along this section, with plazas or amphitheaters reaching out from development at the edge of the river.

For the San Diego River Park to succeed, however, it is essential that development reorient itself towards the river to provide a synergy with the river corridor, while providing "breathing room" for wildlife habitat, trails, natural open space, and public spaces. By re-vegetating adjacent areas and rights-of-way with native species, the infrastructure that has disconnected the side canyons may serve as the means to reestablish wildlife connections to upland open space.



Lower Valley Section

Condition: The Lower Valley is heavily suburbanized; extensive paving in the form of parking lots and roadways, massive infrastructure projects and relatively low density development surround this reach. The river's presence is further marginalized by channelization and ponding. Simple lack of space presents a severe hydrological constraint throughout the Lower Valley, and exotic vegetation negatively impacts the reach's native ecosystems.

The communities of the Lower Valley and above the valley walls are particularly deficient in active recreation space available and the San Diego River Park should play a role in addressing this need. Little undeveloped space or public land exists within this reach, offering limited opportunities for the river to meander, for wildlife habitat to expand, or for the creation of parks and trails.

Recommendations:

- Create a continuous trail.
- Acquire land and/or establish open space easements.
- Establish appropriate open space corridor width
- Pursue opportunities to acquire a portion of Riverwalk Golf Club if it redevelops.
- Create a major park and open space adjacent to the river and the Qualcomm Stadium site.
- Create interpretive opportunities at pedestrian bridge crossings where the river can be seen and experienced.
- Restore river at former water hyacinth water treatment plant and provide interpretive information regarding previous use and river rehabilitation processes.
- Explore potential sites for a Heritage Farm, a historic agriculture interpretive site and community garden; create connections from Farm to surrounding area.

Lower Valley looking northwest

The heavily suburbanized condition of this reach should be seen less as a deterrent for future park scenarios than as a fulcrum upon which innovative park solutions can be leveraged. The San Diego River Park has the potential to combine 'natural' programs, such as the healthy hydrology of the river and its ecological habitat, with 'urban' programs, such as active and passive recreation and an accessible and urban corridor edge. By inviting activities such as field sports, entertainment, and shopping into the corridor, the river becomes a place of varied experiences. An active river scene will reach out to a large number of user groups and introduce the river's historic and modern faces to a broad spectrum of people. The rights of way associated with the valley infrastructure present key opportunities to establish gateways into the valley and the city, and to extend the color and texture of native plant communities throughout the valley.

Space for the river must be sought out in the Lower Valley. Open space easements and property acquisition are necessary for the San Diego River Park to become a success. The future redevelopment of Riverwalk Golf Club and Qualcomm Stadium are two opportunities for creating parks and open space.

The Valley should be considered as a whole, and consistent recommendations regarding new development, streets and landscape should be established. These guidelines should set the character of the valley, moving it toward being a greener place planted with native species that concentrates higher-density away from the river edges. Moving density away from the river will allow the San Diego River Park to provide for appropriate corridor width. Where little space is available, these corridors should aim to maintain the most adaptable species. Where greater corridor width can be achieved, the San Diego River Park should seek to accommodate more sensitive species that have greater habitat requirements.

Lower Valley from University of San Diego looking southeast

Key Sites:

Riverwalk Golf Club Redevelopment Site

The Levi-Cushman Specific Plan for the Riverwalk Golf Club site was approved in 1987. The plan proposes roughly 5.2 million square feet of mixed-use development including residential, retail, commercial, office and recreational uses for the approximately 200 acre site. The Specific Plan aligns with the San Diego River Park Draft Master Plan in focusing development on the river, and this concept should guide future modifications to the plan. The Specific Plan departs from San Diego River Park goals in proposing a 12-acre island as well as a 25-foot river planting buffer intended to "prevent direct access to habitat areas". These recommendations should be modified to favor a naturalized river pattern as suggested in this Plan, increasing the channel width, creating meander and separating the stream flow from any existing ponds.

The San Diego River Park Trail can serve the site by providing an amenity to people living and working within the proposed development, as well as providing pedestrian and bicycle commuter access to surrounding neighborhoods and the trolley. The trolley right of way may offer the opportunity for an interim trail alignment, until a more defined redevelopment concept can determine the best permanent location.

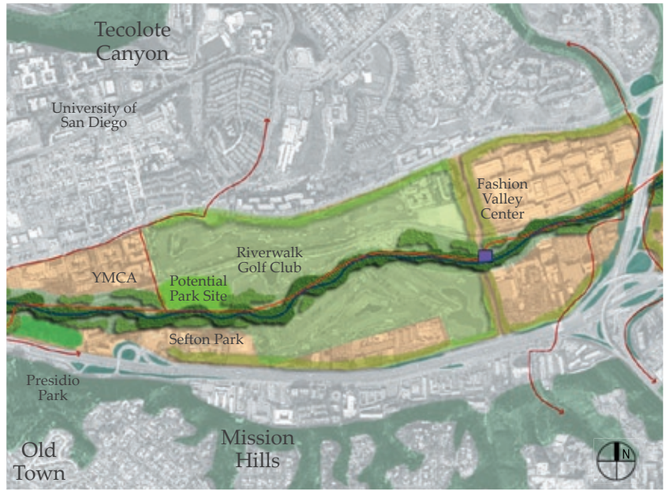
Because Riverwalk is anticipated to redevelop in the future, there is an opportunity to establish a neighborhood-scale park here. As the site redevelopment plans evolve, 10-15 acres of public space should be sought adjacent to the river but buffered with naturalized open space. The nearby YMCA is expected to continue its private, fee-based recreation facility as will Sefton Park little league field. Connection to these facilities could be strengthened with connected open space and a trail head near the YMCA. While the previous Mission Valley community plan calls for a neighborhood park at the YMCA site, usable land is at a premium, and environmental conflicts with the nearby wetlands are obstacles that make community park acreage unlikely.

Potential Neighborhood Park Elements

- Active recreation and children's play area
- Location visually or conceptually connected to the river
- Character reflects the river's ecology and history
- River function incorporated into design

Key Points

- Critical location for continuity of the San Diego River Park Trail and for meeting basic park and recreation needs in Mission Valley.
- Acquisition of 10-15 acres is recommended to establish a neighborhood park.
- Existing Specific Plan proposes extensive development, and further ponding and channelization of the river.
- In the short term, the multi-use path should be developed following the trolley alignment, within the trolley right-of way. In the long term, the multi-use path should be developed adjacent to the Open Space Corridor.
- Establish an appropriate open space and habitat corridor width. The open space and habitat corridor should provide adequate width to re-contour the river channel to allow for increased river length and meander and to expand native riparian habitat.



Riverwalk Golf Club

Multi-use path at Riverwalk

The river is unprotected from runoff through the golf course

View of Presidio from Riverwalk Golf Club

Qualcomm Stadium

The City of San Diego and the San Diego Chargers have been in negotiation regarding the future of Qualcomm Stadium, including the potential to construct a new stadium on the site. The potential redevelopment of the stadium also creates the opportunity for a river-oriented approach that creates significant new open space and park land on this site. Such a park should be a minimum of 20 to 40 acres. The site should be adjacent to the river, but buffered with substantial naturalized open space that allows for a wider river channel and increased riparian habitat, transitioning to upland native vegetation at the trolley alignment.

This site is the last remaining city owned property that is large enough to be in scale with the river valley and the city itself. Careful consideration should be given to the intrinsic value of this place as a public green space. As a regionally scaled, river-oriented park providing naturalized open space adjacent to the river as well as recreation facilities, it can act as a complement to Mission Bay Park, Balboa Park and Mission Trails Regional Park.

Key Points

- Land is currently owned by City of San Diego.
- Critical location for meeting basic park and recreation needs in Mission Valley.
- Critical location for creating continuity in San Diego River Park and San Diego River Park Trail.
- Potential for site to redevelop for more intensive use makes time critical to taking action.
- Develop community scale park with an extensive naturalized component adjacent to the river corridor; this park should have an extensive naturalized component. Locate passive recreation on north and south sides of trolley alignment, active recreation on current stadium site.
- Provide multi-use and pedestrian trails adjacent to river corridor.
- As the site specific development plan is prepared, establish an appropriate open space and habitat corridor that achieves wildlife movement and habitat objectives, varying in width and extending to the trolley alignment. The open space and habitat corridor should provide adequate width to re-contour the river channel to allow for increased river length and meander and to expand native riparian habitat.
- Extend open space corridor between proposed stadium location and I-15 to create new habitat and trail connection to Murphy Canyon.
- The "Mission City" bridge project was proposed by the City in 2002, but was not approved. This project may be reconsidered. In order to insure the goals of the San Diego River Park, it is important to co-ordinate with any possible bridge proposals.

Potential Program Elements

- Natural riparian and upland habitat areas
- Ball fields
- Picnic facilities
- Amphitheater
- Boardwalk/overlooks for fishing
- Boardwalk/overlooks for bird watching
- Play area with "natural" character (wood, boulders, sand)
- Pedestrian linkage: park to river and Murray Canyon
- Focus park toward river

In the event of future redevelopment of the Qualcomm Stadium site, the opportunity would exist for a river-oriented approach that creates significant new open space and parkland on site.

Alternative Scenarios

Four alternative scenarios are explored here to reveal a range of potential approaches to increase open space on the site while accommodating the existing stadium, a new stadium, or no stadium at all. In all scenarios, the land between the trolley line and the river should become naturalized open space, with a wider river channel and expanded riparian habitat; green connections should be created through the site linking Murphy Canyon, Mission Village Drive to the river and reaching toward Ruffin Canyon; and the existing pavement be replaced with a porous pavement that reduces surface runoff and improves groundwater recharge and natural filtration to clean urban runoff before it reaches the river. These are prepared as conceptual ideas only, and are not based upon specific economic and programmatic goals.

Qualcomm Stadium Site

Stadium replaced with a Mission Valley Central Park

This site is the single largest publicly owned land in the valley. It is the only opportunity to create park and open space that is in scale with the City as a whole and the river valley itself. A new regionally oriented park in this location would become a major destination between Mission Bay Park and Mission Trails Regional Park and reestablish a sense of the valley floor as a place. This regional facility would serve many roles, each emphasized by its scale. This 160 acre park would create significant new riparian and upland habitats that link to adjacent canyons, eliminate a significant source of urban runoff and provide adequate space for natural filtration of remaining runoff before it reaches the river, provide adequate land to meet City park, open space and recreation goals for Mission Valley; and provide adequate space to reveal the many roles the valley has played through history, from Kumeyaay villages through Spanish settlement and early American agriculture. As another regionally scaled focus, the Mission Valley Central Park would be a logical location to create a major access point to the river, with a visitor and interpretation center and other community and regionally oriented recreational facilities.

Stadium replaced with a Mission Valley Central Park

Stadium replaced with Park and Mixed Use Development

Removing the stadium creates the opportunity for substantial increase in park and open space in Mission Valley. By allowing a limited extent of mixed use development, the City of San Diego will appreciate economic return from this valuable site. The development should emphasize a river orientation, and serve as a model for sensitive and sustainable design, setting the standard for other redevelopment in the valley. A significant new park of 80 acres is created, allowing for community and regionally oriented recreational facilities and substantial natural open space. This natural open space system can provide for riparian habitat along the river and upland habitat that would extend toward Murphy Canyon, Mission Valley Drive and Ruffin Canyon, thereby giving a natural habitat structure to the park.

Stadium replaced with Park and Mixed Use Development

Existing Stadium Improved

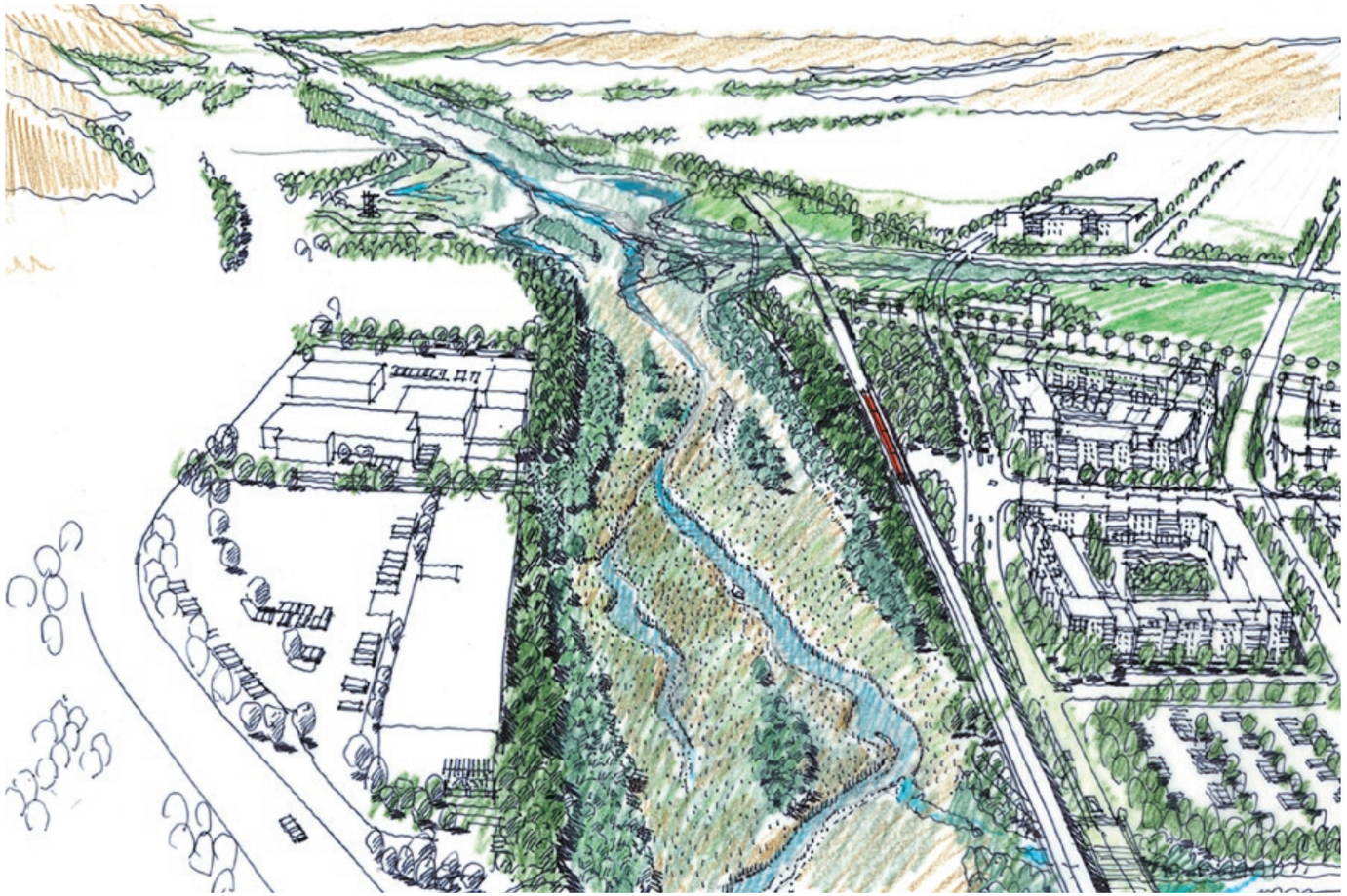
If the existing stadium were to remain, the site can be substantially improved by creating mixed use development along Friars Road that incorporates structured parking, thus reducing the need for existing parking along the river. The development is set within a native upland landscape to create a visual and textural extension of the river corridor. An active park is created in the southwest corner of the site, north of the trolley alignment, set within an upland native landscape. Natural park "fingers" extend from the river through the site to Friars Road. These fingers serve as access corridors and storm water filtration channels cleansing runoff before it reaches the river.

Existing Stadium Improved

New Stadium

This scenario would recommend a new stadium relocated on-site that would support a consolidation of open space. Thereby increasing its function as habitat and its visual continuity and impact. Natural "fingers" extend from the river to link Murphy Canyon and Mission Village Drive with the river and serve as stormwater filtration channels. An active park is created on the site of the existing stadium, linked to the river by the naturalized finger. Green corridors should extend from the river to all proposed new development, creating a sense that the development is nested within the river environment.

New Stadium



San Diego River and Qualcomm Stadium Conceptual Site Redevelopment

Murray Creek Enhancement

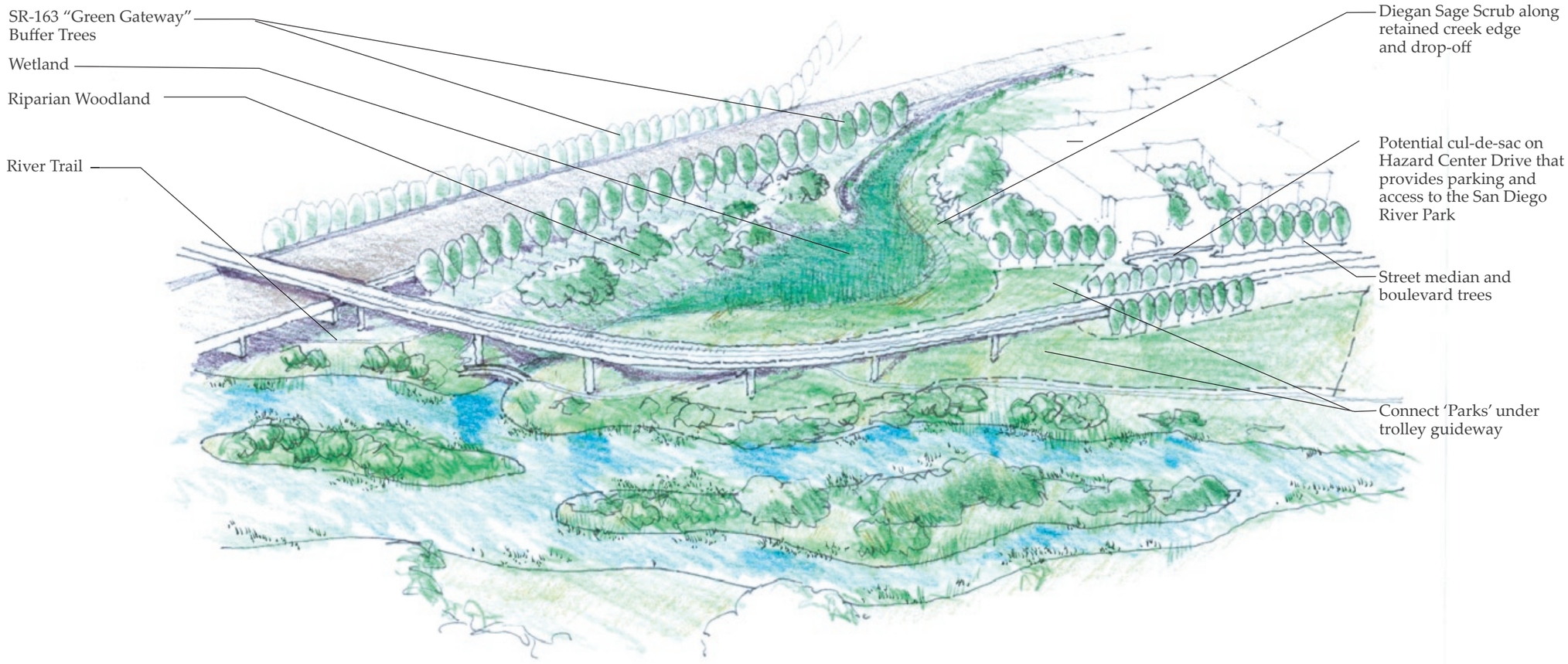
Murray Creek currently passes under Friars Road just east of its intersection with SR-163. It is channelized, lined with rip rap (large rocks of a fairly uniform size), then enters four large culverts passing under the alignment of the proposed extension of Hazard Center Drive and drains into the San Diego River.

Enhancing Murray Creek will offer the opportunity to celebrate the confluence of tributary and river, improve water quality flowing into the river and expand wildlife habitat. The Murray Creek channel should be widened where feasible from a flood control standpoint, and the rip rap removed or visually softened with plantings of native vegetation species. Two alternative approaches should be considered, both of which involve removal of the culverts. One alternative that should be explored fully is to consider not extending Hazard Center Drive, and creating a cul-de-sac and small parking area that can serve as an access point to the San Diego River Park and Trail. The other alternative is to extend Hazard Center Drive, and to replace culverts with a bridge structure that is adequate to allow growth of riparian vegetation beneath it, thus increasing the potential for wildlife movement to the river, with adequate space for a spur trail connecting nearby residences and retail development to the San Diego River Trail. The Murray Creek area can support wetland and riparian woodland vegetation, transitioning to Diegan Sage Scrub at higher elevations adjacent to SR-163 and surrounding development. Interpretive signage at the trail and arrival points can increase awareness of the canyon-valley physiography and the presence of side canyon streams. Signage on the bridge should identify Murray Creek. Plantings of trees along SR-163 will buffer the Creek from views to traffic and link it with the "Green Gateway" proposed along SR-163 as it crosses the river valley.

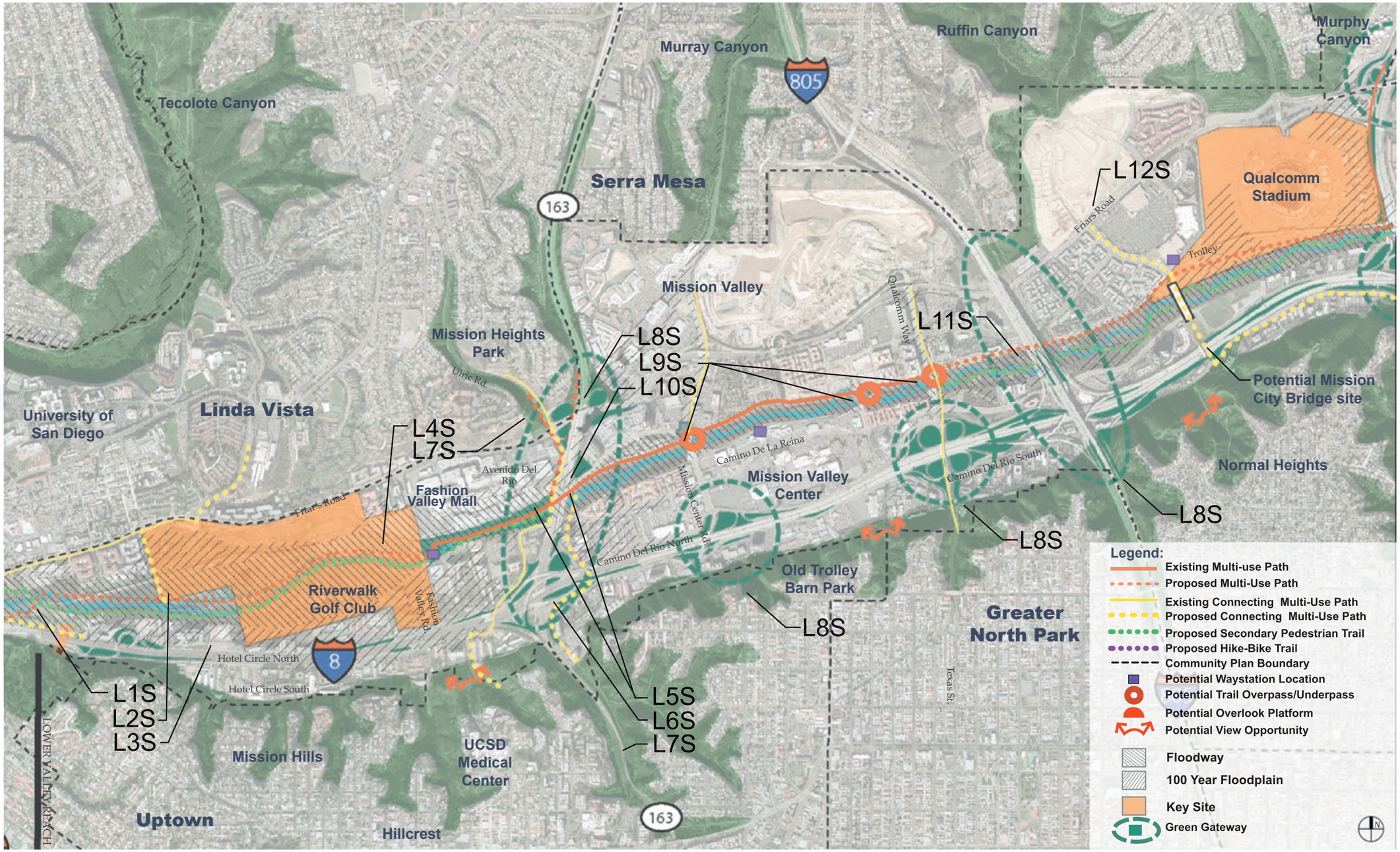
Murray Creek along SR-163

Culverts under alignment of Hazard Center Drive future extension

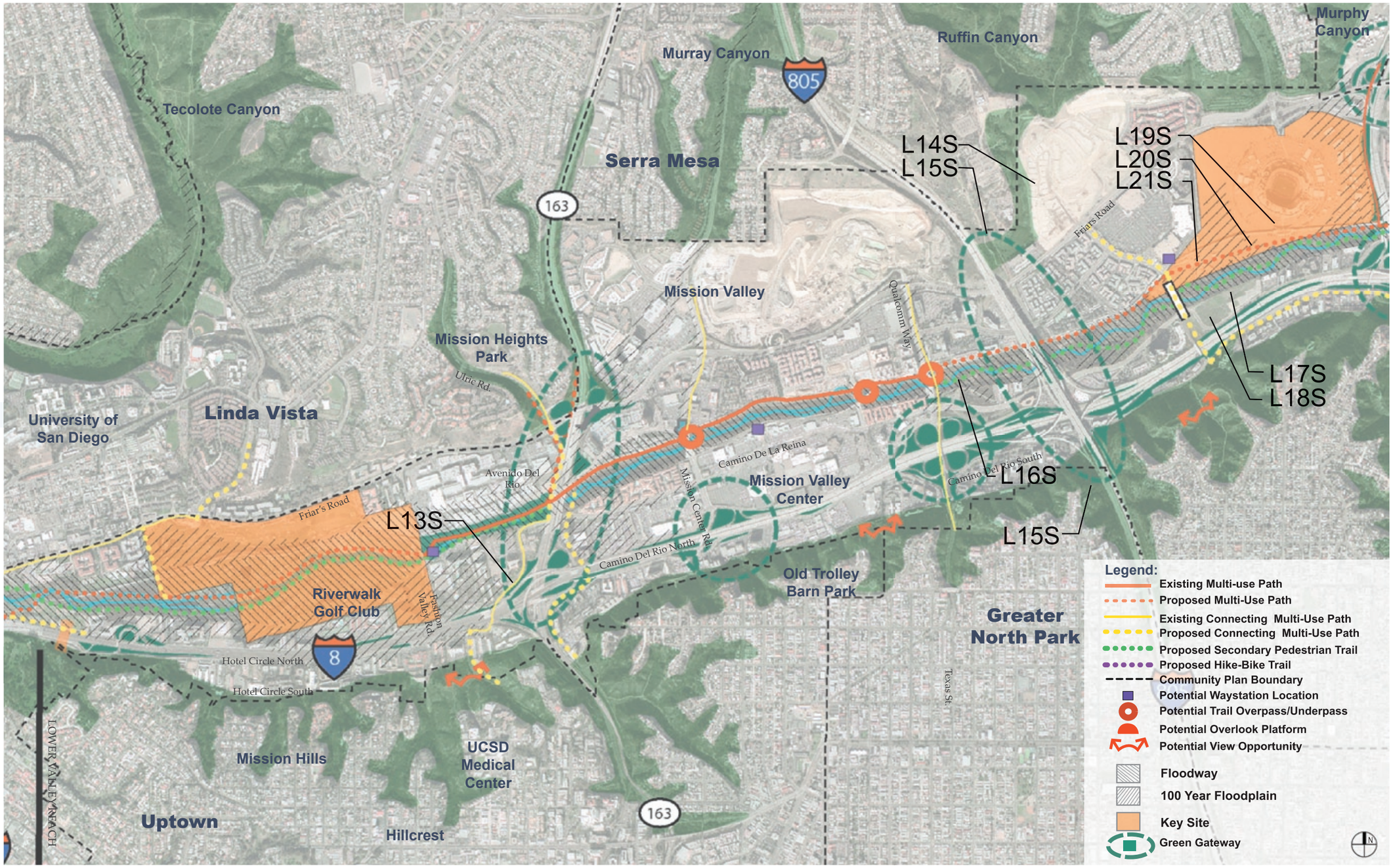
Murray Creek outfalls



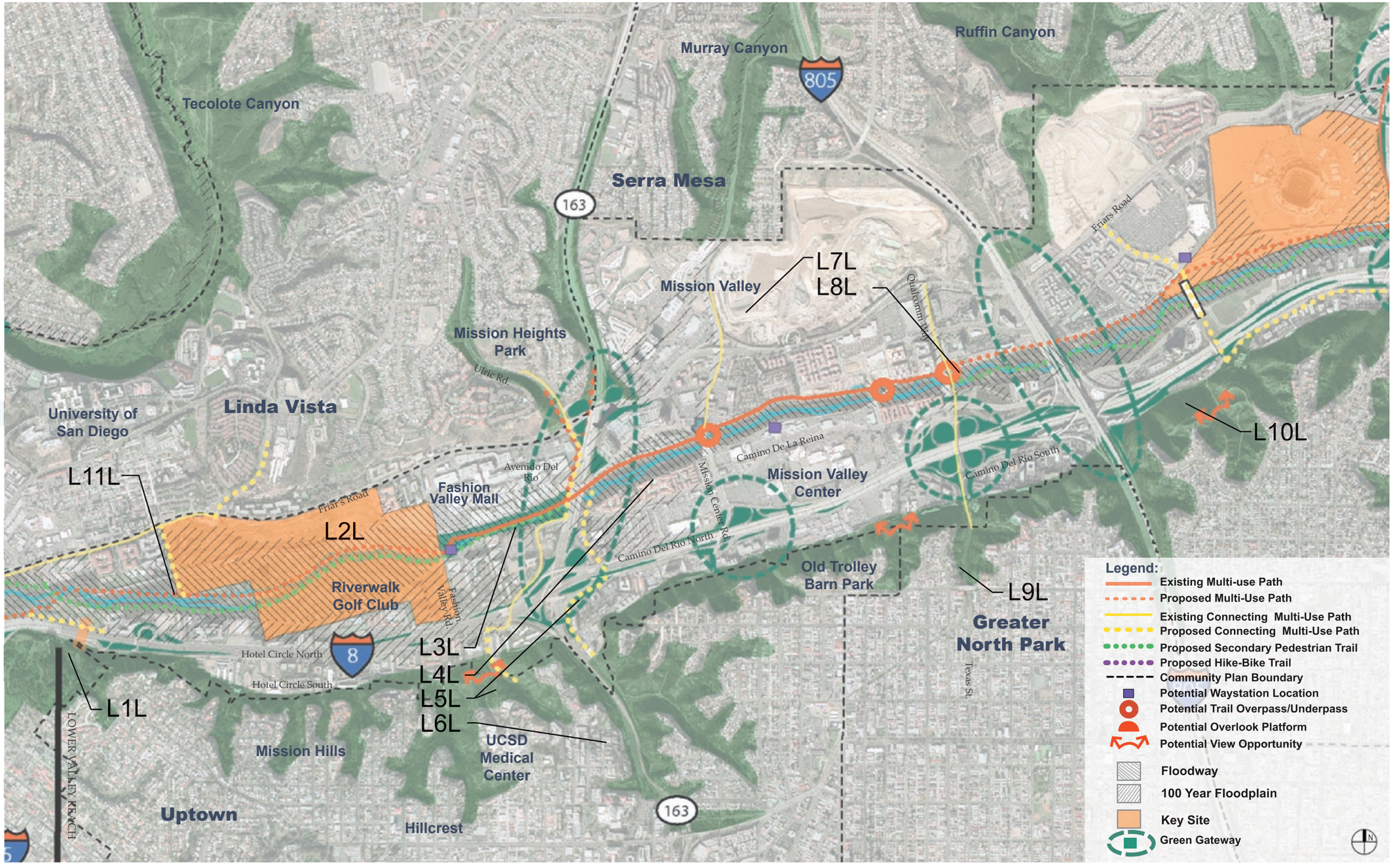
Conceptual Daylighting of Murray


Tecolote Canyon
Murray Canyon
Ruffin Canyon
Murphy Canyon
805
Serra Mesa
163
L12S
Friars Road
Qualcomm Stadium
Trolley
Mission Valley
Qualcomm Way
L11S
Mission Heights Park
Ulric Rd.
L8S
L9S
L10S
Potential Mission City Bridge site
University of San Diego
Linda Vista
L4S
L7S
Camino De La Reina
Avenido Del Rio
Fashion Valley Mall
Mission Center Rd.
Mission Valley Center
Camino Del Rio South
Normal Heights
L8S
Camino Del Rio North
Old Trolley Barn Park
L8S
Greater North Park
Riverwalk Golf Club
Fashion Valley Rd.
Hotel Circle North
Hotel Circle South
8
L1S
L2S
L3S
L5S
L6S
L7S
Texas St.
LOWER VALLEY REACH
Mission Hills
UCSD Medical Center
Uptown
Hillcrest
163
Legend:
Existing Multi-use Path
Proposed Multi-Use Path
Existing Connecting Multi-Use Path
Proposed Connecting Multi-Use Path
Proposed Secondary Pedestrian Trail
Proposed Hike-Bike Trail
Community Plan Boundary
Potential Waystation Location
Potential Trail Overpass/Underpass
Potential Overlook Platform
Potential View Opportunity
Floodway
100 Year Floodplain
Key Site
Green Gateway
N

KEYNOTE	RECOMMENDATION	IMPLEMENTATION	BENEFITS			
Short Term			HYDROLOGY	ECOLOGY	RECREATION	EDUCATION
L1S	Aggregate undeveloped land of YMCA, Sefton Fields, and Metropolitan Transit Development Board as open space to broaden river channel and expand habitat.	Coordinate appropriate agencies and community/special interest groups to identify means of aggregating land. Integrate with Mission Valley Preserve to aggregate land to initiate specific study to develop design concept.	●	●	●	●
L2S	Explore potential to develop Neighborhood Park. Engage Riverwalk Golf Course land owner in discussion to explore options to extend trail along trolley corridor, to modify river edges in golf course in the short term, and to modify proposed development plan in the long term. Refer to the Lower Valley Key Sites section for additional detail.	Engage land owner to discuss potential for land acquisition or easement for trail connection and to improve river edges through golf course. Coordinate with San Diego Bicycle Master Plan and Riverwalk GC owner. Engage bicycle master planners in process to explore potential revised alignment following trolley right-of-way. Initiate dialogue to explore long term intent and potential of land to accommodate park and/or trails. Coordinate with Mission Valley Community Plan, and appropriate agencies and community/special interest groups to identify alignment and buffer to incorporate into plan update as amendment.		●	●	●
L3S	Explore potential to acquire under-developed land site. Vacant parcel is an opportunity to create a new river oriented community amenity.	Engage land owner to discuss potential for land acquisition, easement or to develop a river oriented amenity with a multi-use path connection. Current use is parking / storage. Investigate potential archeological value of the site.			●	●
L4S	Create historic interpretation of Kosoy Rancheria and agriculture adjacent to trail.	Engage land owner to discuss potential for land acquisition and/or easement for trail connection and interpretive waystation. Integrate with trail implementation project.			●	●
L5S	Create trail under SR-163 to connect existing Class I Bike Paths to the east and west of SR-163 and improve river channel width and edge condition.	Implement Class I Bike Path below Highway 163 north of the river as proposed by the City of San Diego Bicycle Master Plan and incorporate grading and natural revegetation with construction.	●	●	●	
L6S	Establish Green Gateway along SR-163 by introducing native landscapes along roadways.	Initiate dialogue with Caltrans, City of San Diego Streets and Mission Valley Community Plan to explore the methods for implementing native plant palette in rights-of-ways and undeveloped easements.		●		
L7S	Create open space and trail connection to upland communities along Ulric Street.	Coordinate with San Diego Bicycle Master Plan and Mission Valley Community Plan to identify specific route alignment.		●	●	
L8S	Establish Green Gateway at interchanges throughout the valley by introducing native vegetation along roadways.	Initiate dialogue with Caltrans and appropriate community groups to explore means of changing right-of-way plant palette.		●		
L9S	Explore potential to connect FSDRIP bike trails across intersections with grade separated crossings on north side of river.	Follow proposed alignment of Class 1 Bikeway in accordance with San Diego Bicycle Master Plan. Initiate dialogue with Bicycle Master Planners and City of San Diego Streets to identify funding source and develop detail design and construction plan.			●	
L10S	Improve open space connection between Murray Creek and river valley by daylighting Murray Creek within existing right-of-way. Daylight Murray Canyon drainage and create wetland and natural filtration zone. Refer to the Lower Valley Key Sites section for additional detail.	Initiate dialogue with appropriate community/special interest groups and land owners to explore means of influencing development in progress modify street extension and integrating creek corridor into future evolution of existing development.	●	●	●	
L11S	Create trail connection from Mission City Trolley Station to Qualcomm Way.	Coordinate with San Diego Bicycle Master Plan and Mission Valley Community Plan to identify specific route alignment.			●	
L12S	Utilize existing underpass as a means of connecting to neighborhoods and canyon north of Friar's Road.	Support City of San Diego and property owners in effort to improve underpass entrances. Provide lighting and potential better pedestrian connections to the underpass.			●	


Murphy Canyon
Ruffin Canyon
Murray Canyon
805
Tecolote Canyon
Serra Mesa
163
L14S
L15S
L19S
L20S
L21S
Friars Road
Mission Valley
Qualcomm Way
Mission Heights Park
Ulric Rd.
L17S
L18S
University of San Diego
Linda Vista
Camino De La Reina
Avenido Del Rio
Mission Valley Center
Camino Del Rio South
L16S
L15S
Mission Center Rd.
Friar's Road
L13S
Camino Del Rio North
Old Trolley Barn Park
Riverwalk Golf Club
Fashion Valley Rd.
8
Hotel Circle North
Hotel Circle South
Greater North Park
Texas St.
LOWER VALLEY REACH
Mission Hills
UCSD Medical Center
Uptown
Hillcrest
163
Legend:
Existing Multi-use Path
Proposed Multi-Use Path
Existing Connecting Multi-Use Path
Proposed Connecting Multi-Use Path
Proposed Secondary Pedestrian Trail
Proposed Hike-Bike Trail
Community Plan Boundary
Potential Waystation Location
Potential Trail Overpass/Underpass
Potential Overlook Platform
Potential View Opportunity
Floodway
100 Year Floodplain
Key Site
Green Gateway
N

KEYNOTE	RECOMMENDATION	IMPLEMENTATION	BENEFITS			
Short Term			HYDROLOGY	ECOLOGY	RECREATION	EDUCATION
L13S	Create bike path connection to San Diego River Park Trail from Bachman Place, Camino de la Reina and Avenida del Rio.	Coordinate with San Diego Bicycle Master Plan and develop specific study to confirm route alignment.			●	●
L14S	Explore potential to reconnect Ruffin Canyon with the River	Initiate dialogue with appropriate community groups, land owners and developers to integrate the development with the San Diego River Park. Explore design modifications to extend native plant species and trail connections from Ruffin Canyon through the redevelopment site.		●	●	●
L15S	Establish Green Gateway along I-805 across the valley.	Initiate dialogue with Caltrans, City of San Diego Streets and Mission Valley Community Plan to explore the methods for implementing native plant palette in rights-of-ways and undeveloped easements.		●		
L16S	Collaborate with property owners toward creating river park oriented developments and, where possible, explore potential to acquire undeveloped land adjacent to river.	Engage land owners in dialogue to explore potential river park project opportunities and/or purchase of open space lands or easements adjacent to the river. Coordinate with Mission Valley Community Plan to include in update as amendment.	●	●	●	
L17S	Mission City Parkway Bridge Mitigation Site. Integrate new riparian and sage scrub habitat restoration with San Diego River Park and trail.	Coordinate with appropriate public agencies and community groups.		●	●	
L18S	River Garden site. Connect to San Diego River Park and Trail.	Collaborate with San Diego River Park Foundation and appropriate community groups to support River Garden project and connect it to the San Diego River Park Trail. Coordinate with Mission Valley Community Plan to include in update as amendment.		●	●	●
L19S	If stadium redevelops, engage with developer and planner to develop a community park and additional naturalized open space with the San Diego River Park. Refer to the Lower Valley Key Sites section for additional detail.	Coordinate with City of San Diego and stadium developers to create a plan that engages the river and adjacent canyons. This is a key site in the Lower Valley Recommendations, refer to the preceding pages for additional detail and potential planning alternatives. Coordinate with Mission Valley Community Plan to include an update as an amendment.	●	●	●	●
L20S	If stadium redevelops, engage developers to integrate open space connections between San Diego River Park and canyons. Refer to the Lower Valley Key Sites section for additional detail.	Coordinate with City of San Diego and stadium developers to create a plan that engages the river and adjacent canyons. Coordinate with Mission Valley Community Plan to include an update as an amendment.		●	●	
L21S	Create multi-use trail in conjunction with Qualcomm redevelopment.	Coordinate with stadium redevelopment process and San Diego Bicycle Master Plan to identify specific alignment.		●		


Tecolote Canyon
Murray Canyon
Ruffin Canyon
805
Serra Mesa
163
Friars Road
L7L
L8L
Mission Valley
Qualcomm Way
Mission Heights Park
Ulric Rd.
Linda Vista
University of San Diego
L10L
L11L
Avenido Del Rio
Camino De La Reina
Mission Valley
Camino Del Rio South
Mission Center Rd.
Fashion Valley Mall
Friar's Road
L2L
Mission Valley Center
Camino Del Rio North
Old Trolley Barn Park
Riverwalk Golf Club
Fashion Valley Rd.
L9L
Greater North Park
Hotel Circle North
Hotel Circle South
8
L3L
L4L
L5L
L6L
Texas St.
L1L
LOWER VALLEY REACH
Mission Hills
UCSD Medical Center
Uptown
Hillcrest
163
Legend:
Existing Multi-use Path
Proposed Multi-Use Path
Existing Connecting Multi-Use Path
Proposed Connecting Multi-Use Path
Proposed Secondary Pedestrian Trail
Proposed Hike-Bike Trail
Community Plan Boundary
Potential Waystation Location
Potential Trail Overpass/Underpass
Potential Overlook Platform
Potential View Opportunity
Floodway
100 Year Floodplain
Key Site
Green Gateway
N

KEYNOTE	RECOMMENDATION	IMPLEMENTATION	BENEFITS			
Long Term			HYDROLOGY	ECOLOGY	RECREATION	EDUCATION
L1L	Connect to Presidio Park via Taylor Street bridge over I-8.	Coordinate with Caltrans to explore potential to improve pedestrian component of the Taylor Street bridge to better accommodate pedestrians and bicyclists.		●	●	
L2L	Engage landowners to encourage any future redevelopment of Riverwalk GC to address river.	Coordinate with land owners to encourage modifications to current plan to include habitat and open space corridor that follows the 100 year floodway to allow for river meander, native vegetation and San Diego River Park Trail corridor.		●	●	●
L3L	Engage landowners to explore potential to create urban park oriented to the river on both sides of river.	Initiate dialogue with land owners and developers to explore potential to orient development to the river and create a quasi-public urban park edge to the river associated with retail uses.		●	●	●
L4L	Investigate opportunities to improve water quality in FSDRIP and explore the potential and methods needed to recreate the FSDRIP area as a component of a functional river environment by removing flow restrictions and separating river from ponds.	Initiate feasibility study investigate removal of flow restrictions, and add aeration devices, etc. to improve water quality, improve the river environment and to separate stream flow from ponds and improve wildlife habitat and trail experience.	●		●	●
L5L	Improve trail connections between river corridor and canyons.	Coordinate with San Diego Bicycle Master Plan to identify specific alignment and connection priorities.			●	
L6L	Create trail and open space connection to Balboa Park.	Initiate feasibility study to identify specific trail alignment. Coordinate with San Diego Bicycle Master Plan and Caltrans to identify potential trail alignment.		●	●	
L7L	Relate and connect open space in development plans with the River Park. Create 'green street' edge with native plant species to improve visual and habitat connection to Murray Canyon	Coordinate with land owners and developers to integrate the San Diego River Park into the development process and to explore design modifications to a river and valley sensitive approach.		●	●	●
L8L	Implement bike path as part of the San Diego River Park Trail.	Coordinate with San Diego Bicycle Master Plan to identify specific alignment and implementation priority.		●	●	
L9L	Create open space and trail connections to uplands via an improved Texas Street.	Coordinate with City of San Diego and the San Diego Bicycle Master Plan to improve Texas Street and create a dedicated multi-use trail separated from streets with a naturalized open space corridor.			●	
L10L	Improve Mission City Parkway over crossing to connect river corridor and upland open space	Coordinate with Caltrans to explore the potential to improve Mission City Parkway bridge over I-8 to connect people to the uplands.			●	
L11L	Create San Diego River Trail on north side of river through Riverwalk development.	Coordinate with San Diego Bicycle Master Plan and redevelopment of Riverwalk Golf Club. When Riverwalk redevelops coordinate with appropriate agencies, community/special interest groups and land owners to identify trail alignment and development concept that orient to the river.			●	

Confluence

Intent: The Confluence reach is the area between I-15 and Friars Road Bridge. It is where Murphy Canyon, Alvarado Canyon and two minor canyons once joined the San Diego River as it turned west to the Pacific Ocean. This place is not only a confluence of canyons and creeks, but a confluence of people and activity throughout the history of San Diego. This is where the El Camino Real met the east-west transportation route following the San Diego River near the Mission San Diego de Alcala. There is opportunity to reveal this junction of canyons and streams in a way that celebrates the cultural, ecological, and historical significance of each. This reach also acts as gateway to multiple destinations, allowing users to access Murphy Canyon, Alvarado Canyon, Collwood Canyon, Navajo Canyon and the San Diego River valley.

Grantville Redevelopment Study could encourage improvement of property adjacent to the river

Gravel mine ponds below Friar's Road bridge

Condition: This reach is partially enclosed by the steep wall of the knob topped by Mission San Diego de Alcalá. Encroaching development on the east and Interstate 8 on the south further emphasize the sense of enclosure.

The river corridor is also constrained by a series of old gravel mine ponds below the Friars Road Bridge; these ponds impede the normal hydrologic activities of the river system. The narrow vegetated corridor is inadequate to separate stream flow from these ponds and the size and depth of the ponds makes filling impractical. Extensive exotic vegetation infestation is present both in the ponds (*ludwigia*) and in the river (*arundo donax*). As the river turns west it is isolated by highway infrastructure, private property, and difficult physical terrain. The dense *arundo* further adds to the river's inaccessibility.

Recommendations:

River is choked by invasive vegetation

- Create a continuous multi-use path and connecting trails
- Create a connection with Alvarado Canyon and on to Collwood and Navajo Canyons.
- Acquire land or establish easements.
- As the site specific development plans for the River Park and for adjacent land are prepared, establish an appropriate open space and habitat corridor width that follows the existing floodplain, varying in width. The open space and habitat corridor should provide adequate width to re-contour the river channel to allow for increased river length and meander and to expand native riparian habitat.
- River corridor is narrow and constrained above the bend. Past sand and gravel operations have resulted in relatively deep ponds. Separating the stream channel from the ponds is recommended, but additional land is likely necessary to achieve this.
- Acquisition of land adjacent to the river corridor is recommended. Trail connection through this narrow corridor will be difficult due to steep side slopes if additional land is not acquired.
- Trail easements to provide connection to Mission San Diego de Alcala at each end of the Confluence Reach is recommended.
- Coordination with the Grantville Redevelopment Study presents the potential opportunity for the San Diego River Park to positively influence redevelopment as well as to benefit from new activities along the river corridor.

The Grantville Redevelopment Study, now in its early stages, may provide the tools to change the river landscape in the Confluence. By engaging owners of under utilized property on the east edge of the river corridor, the study may create opportunities for the acquisition of land, or establishing easements that could increase corridor width. A wider corridor would allow the river to be separated from the ponds, and offer space to develop a trail corridor. Once the ponds are separated, a complementary action might be improving them for more intensive recreation activity such as fishing and boating.

If the open space corridor in these areas can be expanded to the east, the San Diego River Park Trail can be best accommodated on the east side of the river. The west side of the river is steep and narrow, and does have possibilities for trail construction, however cantilevered construction may be necessary and could have a significant impact on the river.

There is significant potential to recreate an important wildlife habitat connection between the river valley, Murphy Canyon and Alvarado Creek. Such connection would represent a meaningful first step toward reestablishing the physiographic origins of the valley. A trail and habitat/open space connection along Alvarado Canyon Road will link Navajo Canyon with the river, further unifying the valley's recreational and interpretive resources.

Key Sites:

Enhance Confluence with Alvarado Creek

Alvarado Canyon combines with Navajo and Collwood Canyons to form the largest tributary canyon system linked to the San Diego River valley within the City of San Diego. However, today this connection is nearly invisible because of the scale of highway infrastructure and development that have choked the canyon throat at the confluence. Replacing culverts with bridges and gaining adequate land to reduce the channelization of Alvarado Creek will reestablish the visual continuity of the canyon system with the valley. A green connection will also benefit the river by providing natural filtration of surface runoff, increase riparian habitat and allow space for trail connections to communities and open space to the east.

Key Points

- Critical location for reconnecting San Diego River with its most significant tributary canyon within the City of San Diego.
- Although beyond the bounds of this Plan, daylighting and dechannelizing Alvarado Creek is an important component of connecting the river valley to the canyon, providing potential space for expanding and connecting habitat and trail to the canyon, San Diego State University and upland neighborhoods. Similar to enhancing Murray Creek, such improvements are a model for the treatment of all canyons that connect to the San Diego River.

Channelized Alvarado Creek above Grantville Post Office

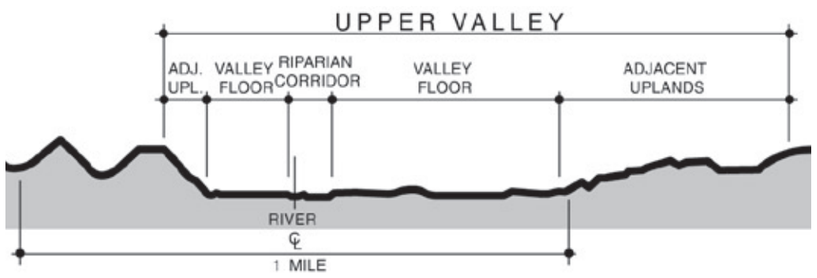
Channelized Alvarado Creek behind Medical Center

A naturalized Avarado Creek and its Greenway can be at the heart of the Grantville redevelopment

Upper Valley

Intent: The Upper Valley reach extends from Friars Road Bridge to the west boundary of Mission Trails Regional Park. It is a reach comprised of complex physiographic and surface conditions, with a diversity of experiences from the enclosure of steep valley walls in the east to broad and open near Admiral Baker Golf Course. Heavily impacted by human activity, conditions in this reach range from the severe character of a surface mine to the exotic landscape of a golf course, bracketed alternately with dense development and sage scrub habitat. This reach is particularly significant for habitat, offering the potential to extend the diverse habitats of Mission Trails Regional Park further into the valley. This reach also offers tremendous potential to transform the landscape dramatically and improve the health of riparian and terrestrial ecosystems.

Upper Valley looking east over Admiral Baker Golf Course



Upper Valley Section

Condition: The Upper Valley is characterized by three hydrologic conditions that are deleterious to the health of the river system. First, the gravel extraction mine bordering Mission Trails Regional Park has channelized the river and disrupted habitat continuity through and across the mine site. The river is similarly channelized further downstream through the federally owned and maintained Admiral Baker Golf Course. This element poses additional risk of surface runoff-carrying pesticides, fertilizers and other pollutants-because of the lack of a buffer between the golf course and the river.

Secondly, the river corridor through the mine site is infested with exotic plant species, particularly Giant Reed *(Arundo donax)*. These exotics displace native riparian vegetation, causing the concomitant loss of the animal species that would typically inhabit this vegetation. Finally, the river channel is interrupted by a series of ponds that obstruct the natural sediment transport processes of the stream. A problem shared by other ponds in the system, the unnatural stream flow invites further infestation by non-native plant species; in still water conditions the encroaching species is typically the surface plant Water Primrose (*Ludwigia spp.*).

Recommendations:

- Establish a continuous open space and viable habitat corridor in the Upper Valley that achieves wildlife movement and habitat objectives. The appropriate design and layout of the corridor should be determined during site specific planning processes that consider habitat, water quality, hydraulic, recreation, and access and development opportunities
- Identify land appropriate for an open space amenity that is accessible and usable by the public.
- Improve interface between Admiral Baker Golf Course and the river.
- Explore opportunities to improve water quality and river pattern.
- Create sites at waystations to interpret the history of the valley settlement and the Old Mission Dam flume.
- Balance the improvement of water quality, the movement of wildlife, the movement of people with high quality development within the Upper Valley.

The San Diego River Park passes through the Grantville Redevelopment Study area. Collaboration between the River Park planning effort and the Grantville study should continue to find opportunities for shared benefits and to ensure compatibility between the two efforts. The redevelopment study presents an important means of implementing the Park through the Upper Valley.

As redevelopment occurs, consideration should be given to separating the river from ponds throughout the Upper Valley, as this action will likely improve flow velocities and reestablish some degree of sediment transport. Hydraulic and hydrologic studies should be conducted in conjunction with redevelopment planning to determine the physical and hydrologic characteristics and ecologic condition of each specific pond, and provide recommendations as to the feasibility, ecological value and open space benefit of separating stream flow from the pond in each location.

Key Sites:

Admiral Baker Golf Course

There are no plans to close or redevelop the course, but there are opportunities to integrate the course in the river corridor. Methods of meshing the two landscapes might include pedestrian trail connections across the course or the redevelopment of the golf course as a "links" or target course with native landscaping between tee and green. The incorporation of native plant species, creating a visual link and habitat corridor from the river corridor to the canyon north of the golf course, would be another strong step toward integrating the river and recreational environments.

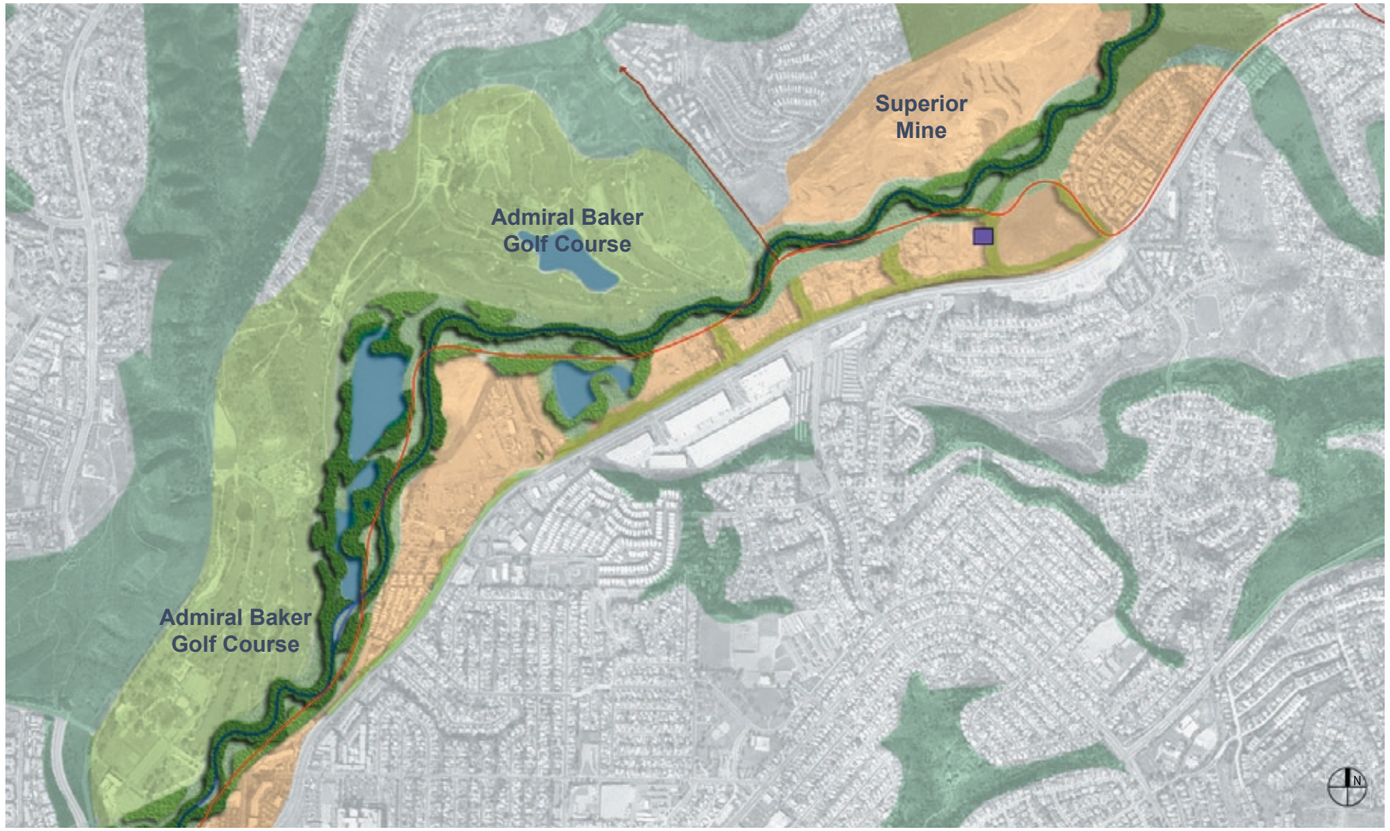
Key Points

- Continuing ongoing discussions with Navy Planners is essential to finding an appropriate level and means of integrating the golf course with the San Diego River Park.
- This is a critical location for expanding habitat area and connections to the upper canyon north of the golf course.
- The potential exists to create trail connections around or possibly through the golf course.
- Establish an open space habitat, and path corridors that achieve wildlife movement and habitat objectives.
- Create a trail connection from the Tierrasanta Community to the San Diego River Park Trail with an overlook at the upper elevation and a waystation at its intersection.

Superior Mine Redevelopment

Evolution of the landscape within the Upper Valley hinges upon successfully engaging the land owners, developers and planners of Superior Mine and adjacent lands with the River Park planning process. As these lands move toward reclamation and redevelopment, collaboration between both planning efforts can bring about benefits to all parties. Creating adequate corridor width for habitat and trail is a minimum requirement. A broad natural corridor through the mine site could serve as a strong organizing feature of the development. This corridor might include trail, native riparian habitat, an infiltration zone for ground water recharge, and/or an improved river channel with introduced meanders. The potential to acquire portions of the site to create open space and recreation land should also be explored. Incorporating elements of the San Diego River Park into the redevelopment of the mine creates the potential of increasing property values and incentive for cooperative planning. The site's close proximity to Mission Trails Regional Park also creates an excellent opportunity to use the river and its landscape as a unique, and identifying character of the site. Cooperative planning, and river-sensitive design would benefit end-users by providing a visual and recreational amenity, as well as commuter bicycle connection to adjacent communities and trolley service.

In the San Diego River Park Illustrative Concept sketch below, an approach is suggested that expands both native riparian and upland vegetation communities. In this concept the ponds are separated from the river. This concept illustrates only one approach and is not intended to propose a specific design for the site. The best solution can only be determined by studying the specific conditions of the pond and the river in conjunction with the site specific planning effort of the adjacent properties.



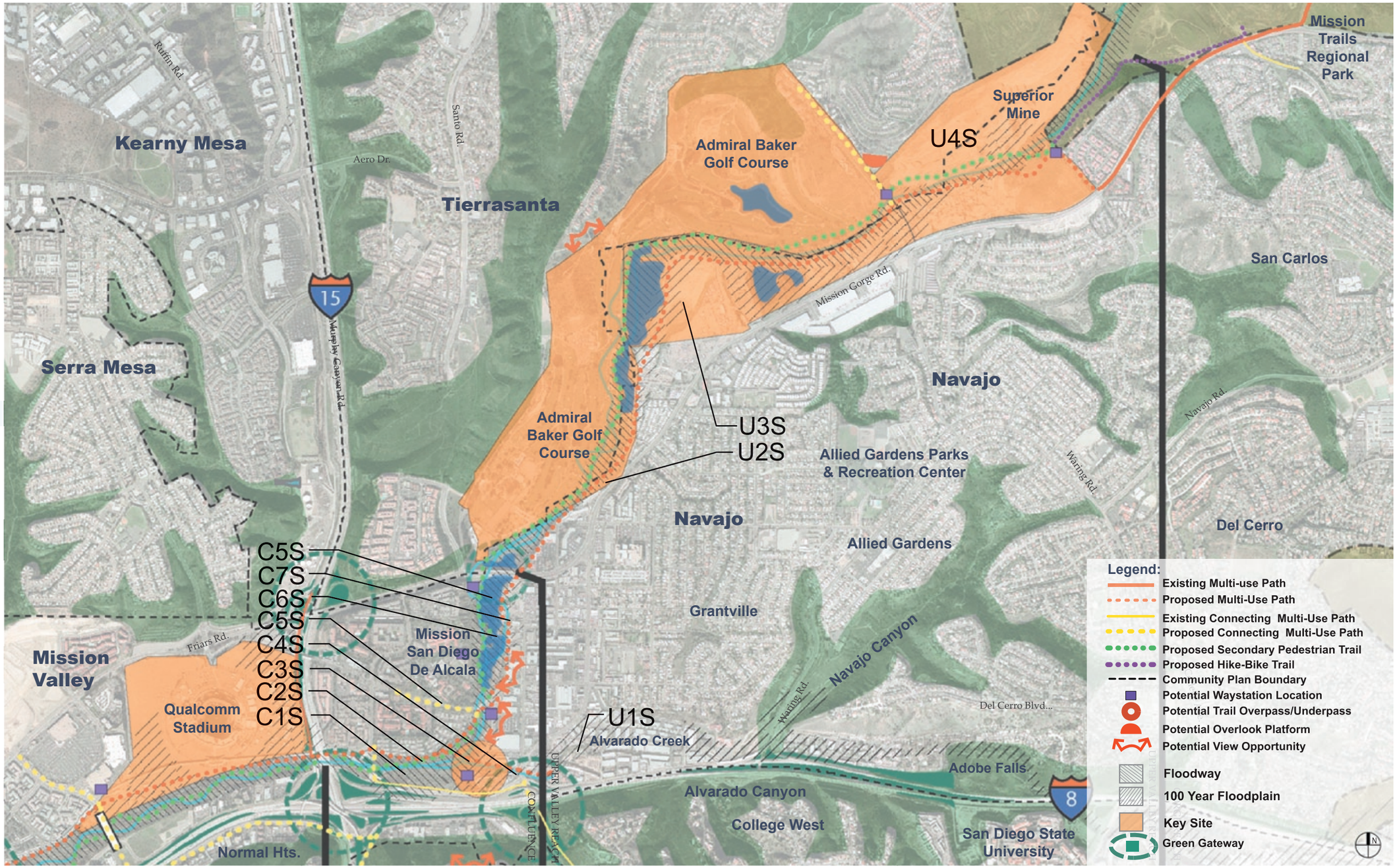
San Diego River Park Illustrative Concept

Key Points

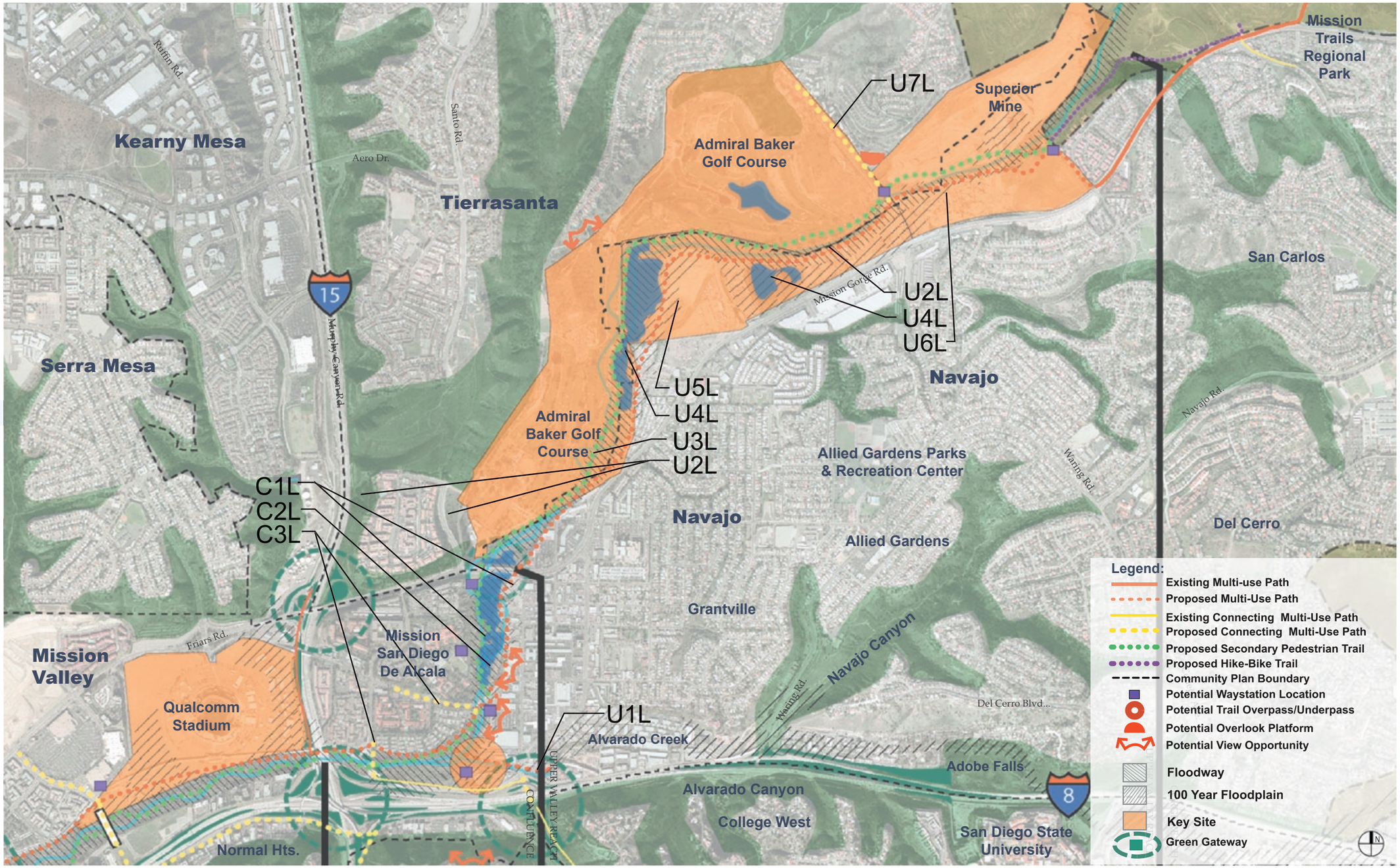
- Ongoing discussions with Superior Mine land owners and developers is essential to finding an appropriate balance between development and open space.
- Potential for the site to redevelop for more intensive use makes time critical to taking action at the planning level. While mining operations are scheduled to continue for another 20 years, potential redevelopment value may reduce this time frame.
- Create an open space amenity that is accessible and usable by the public that provides access to the river as well as value to the development project. The location, size and use of this amenity should be studied as part of the specific land planning studies for the River Park and the development.
- The 100 foot buffer indicated in the Land Development Code - Biological Guidelines should be of such variable width as to protect the habitat and provide adequate areas for redevelopment.

Admiral Baker Golf Course

Superior Mine


Kearny Mesa
Tierrasanta
Serra Mesa
Mission Valley
Navajo
Grantville
Allied Gardens
Del Cerro
San Carlos
Mission Trails Regional Park
Admiral Baker Golf Course
Admiral Baker Golf Course
Superior Mine
U4S
U3S
U2S
U1S
C5S
C7S
C6S
C5S
C4S
C3S
C2S
C1S
Allied Gardens Parks & Recreation Center
Mission San Diego De Alcala
Qualcomm Stadium
Alvarado Creek
Alvarado Canyon
College West
Adobe Falls
San Diego State University
Normal Hts.
Ruffin Rd.
Aero Dr.
Santo Rd.
Murphy Canyon Rd.
Mission Gorge Rd.
Navajo Rd.
Waring Rd.
Friars Rd.
Navajo Canyon
Del Cerro Blvd...
15
8
UPPER VALLEY REACH
CONFLUENCE
Legend:
Existing Multi-use Path
Proposed Multi-Use Path
Existing Connecting Multi-Use Path
Proposed Connecting Multi-Use Path
Proposed Secondary Pedestrian Trail
Proposed Hike-Bike Trail
Community Plan Boundary
Potential Waystation Location
Potential Trail Overpass/Underpass
Potential Overlook Platform
Potential View Opportunity
Floodway
100 Year Floodplain
Key Site
Green Gateway
N

KEYNOTE	RECOMMENDATION	IMPLEMENTATION	BENEFITS			
			HYDROLOGY	ECOLOGY	RECREATION	EDUCATION
Short Term - Confluence						
C1S	Develop city owned property as wetland habitat preserve and coordinate with potential water reclamation plant. Potential for Caltrans property to be developed for habitat and areas for the San Diego River Park Trail.	Integrate Caltrans property as part of riparian open space and pursue dedication of new river open space preserve.	●	●	●	●
C2S	Create San Diego River Park Trail along north edge of river.	Coordinate with the appropriate agencies, community groups and the Grantville Redevelopment Study to identify specific route alignment of potential multi-use trail on north side of the river.			●	
C3S	Coordinate with proposed Grantville redevelopment to create improved open space at the bend in the river.	Coordinate with Grantville Redevelopment Study to identify potential land for park or open space through acquisition or open space easements.	●	●	●	●
C4S	Improve open space and trail connection with Alvarado Canyon and Navajo Canyon.	Coordinate with appropriate agencies and community/special interest groups to study potential and to identify specific route alignment of potential multi-use trail on south side of Alvarado Creek. Coordinate with public agencies to explore potential to aggregate public lands under a single management.	●	●	●	
C5S	Create connection between San Diego River Park Trail and Mission San Diego De Alcala.	Coordinate with appropriate agencies to improve on-street bike lane and provide signage.			●	
C6S	Augment ponds by removing barriers between sections. A larger deep water body is better than a number of smaller, divided segments. If possible, divert low flow of river around the ponds.	Coordinate with Grantville Redevelopment Study and appropriate agencies and community groups to identify potential for open space easements or land acquisition to increase open space on east edge of ponds.	●		●	
C7S	Create San Diego River Park Trail along east edge of river.	Coordinate with appropriate agencies, community groups and the Grantville Redevelopment Study to study potential and to identify specific route alignment of potential multi-use trail on east side of the river if land can be acquired. Identify location for pedestrian bridges crossing the river and creating connection to Mission San Diego de Alacala. If land cannot be acquired study alternative alignment on west side of river.			●	
Short Term - Upper Valley						
U1S	Coordinate with proposed Grantville redevelopment to preserve additional open space along Alvarado Creek Corridor at the confluence with the San Diego River.	Coordinate with appropriate agencies, community groups and the Grantville Redevelopment Study to identify potential land for habitat, trail and recreation through acquisition or open space easements. Coordinate with Navajo Community Plan. Refer to Alvarado Confluence Enhancement on preceding pages.	●	●		
U2S	Create habitat and continuous multi-use trail near river adjacent to Admiral baker Golf Course.	Continue dialogue with Navy planners to explore opportunities to modify golf course to create space for trail corridor and to improve relationship of golf course with the river. Coordinate with Navajo Community Plan.	●	●	●	●
U3S	Engage land owner and ongoing planning effort to explore potential to acquire land as improved open space.	Initiate dialogue with Superior Mine land owners and planners to explore potential to establish naturalized open space and habitat areas adequate to achieve wildlife habitat and path corridor objectives within the undeveloped land. Coordinate with site specific planning processes to explore opportunities to broaden the river channel, create additional meander and locate a continuous multi-use path.		●		
U4S	Coordinate with the anticipated redevelopment of Superior Mine to create interpretation zone of valley history, mining operations, and future redevelopment where appropriate at edge of active operation.	Initiate dialogue with Superior Mine land owners and planners to explore potential to create interpretive kiosk in the short term and begin discussions to consider trail and open space as an integral part of the future redevelopment of the site.				●

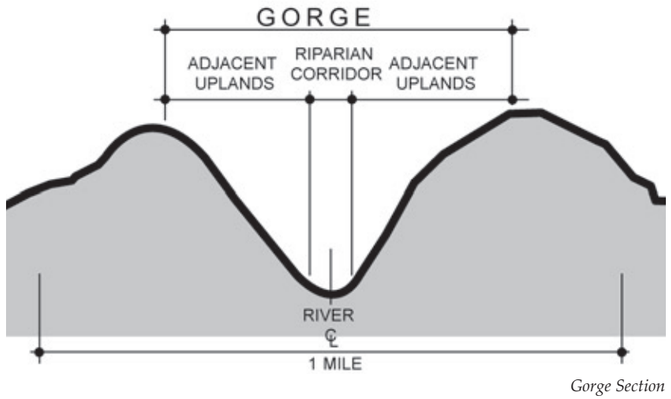

Kearny Mesa
Serra Mesa
Tierrasanta
Admiral Baker Golf Course
Superior Mine
Mission Trails Regional Park
San Carlos
Navajo
Allied Gardens Parks & Recreation Center
Allied Gardens
Grantville
Del Cerro
Mission Valley
Qualcomm Stadium
Mission San Diego De Alcala
Alvarado Creek
Alvarado Canyon
College West
Adobe Falls
San Diego State University
Normal Hts.
Admiral Baker Golf Course
Ruffin Rd.
Aero Dr.
Santo Rd.
Murphy Canyon Rd.
Mission Gorge Rd.
Navajo Rd.
Waring Rd.
Friars Rd.
Navajo Canyon
Del Cerro Blvd...
UPPER VALLEY REACH
CONFLUENCE
U7L
U2L
U4L
U6L
U5L
U4L
U3L
U2L
U1L
C1L
C2L
C3L
15
8
Legend:
Existing Multi-use Path
Proposed Multi-Use Path
Existing Connecting Multi-Use Path
Proposed Connecting Multi-Use Path
Proposed Secondary Pedestrian Trail
Proposed Hike-Bike Trail
Community Plan Boundary
Potential Waystation Location
Potential Trail Overpass/Underpass
Potential Overlook Platform
Potential View Opportunity
Floodway
100 Year Floodplain
Key Site
Green Gateway
N

KEYNOTE	RECOMMENDATION	IMPLEMENTATION	BENEFITS			
			HYDROLOGY	ECOLOGY	RECREATION	EDUCATION
Long Term - Confluence						
C1L	Implement trail and open space plans.	Prepare specific plan for design of trail alignment and natural open space as land or easement is acquired	●	●	●	
C2L	Implement open space identified through Grantville Redevelopment Study to improve habitat and recreation.	It is anticipated that the Grantville Redevelopment Study will identify lands that are appropriate for open space to continue the San Diego River Park and Trail. If land is acquired, initiate specific development plan for the San Diego River Park and Trail.	●	●	●	
C3L	Implement trail connection and interpretive signage to Mission San Diego De Alcala connecting via Rancho Mission Road and San Diego Mission Road.	Coordinate with the San Diego Bicycle Master Plan and Community Plans to identify specific alignment and establish easement. Explore opportunities with willing land owners to establish public access.			●	●
Long Term - Upper Valley						
U1L	Implement potential improvements to trail and habitat connections with Alvarado Canyon and Navajo Canyon.	Prepare specific plan for design of trail alignment, natural open space and day-lighting Alvarado Creek	●	●	●	
U2L	Improve open space and trail connection to Elanus Canyon north of Admiral Baker Golf Course.	Continue dialogue with appropriate agencies, community groups and Navy planners to identify potential locations.		●	●	
U3L	Continue to collaborate with Navy planners to integrate Admiral Baker Golf Course with the river to create expanded riparian corridor, habitat and trail connections.	Continue dialogue with land owners on both sides of river to establish easements or acquire land to create trail and habitat continuity. Coordinate with Navajo Community Plan	●	●	●	
U4L	Separate stream flow from ponds as land is redeveloped.	Continue dialogue with Navy planners and Superior Mine land owners and planners to identify potential locations and develop specific plan for realignment of river channel.	●	●		
U5L	If land is acquired, develop improved open space with views and access to ponds as habitat and recreation areas.	Coordinate with appropriate agencies and community groups to prepare specific plan and implement improved open space parks.	●	●	●	●
U6L	As Superior Mine redevelops, implement plan to focus development on river corridor and to create riparian habitat and multi-use trail as component of redevelopment plan.	Continue dialogue with appropriate agencies, community groups and Superior Mine land owners and planners to integrate the San Diego River Park and Trail with proposed development.		●	●	
U7L	Create trail connection to Tierrasanta neighborhood with the San Diego River Park. This would include an overlook at the higher elevation.	Coordinate with appropriate agencies, community/special interest groups and land owners to identify specific alignment and access points.		●	●	●

Gorge

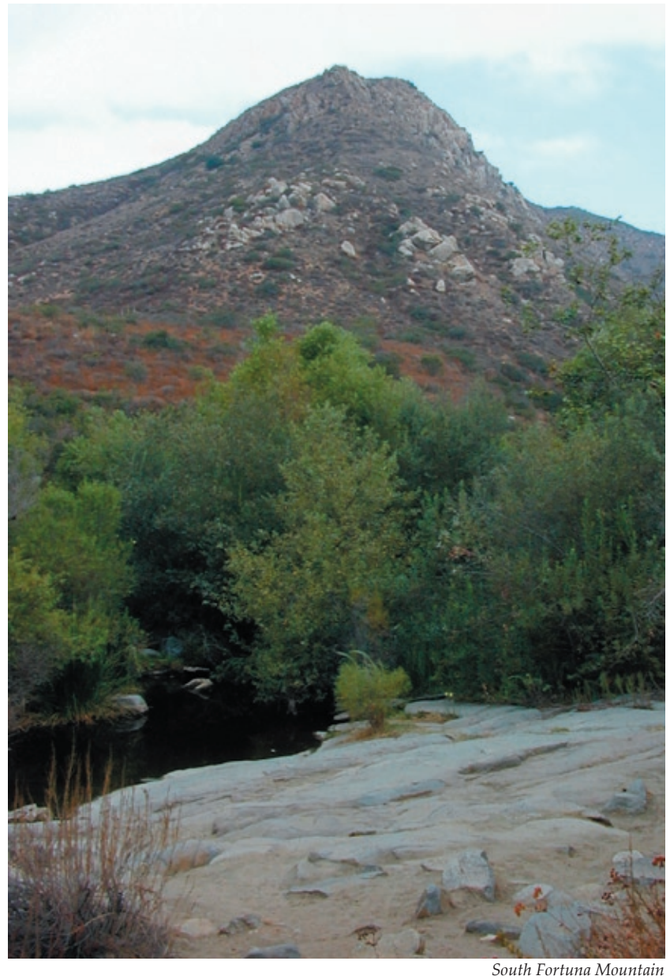
Intent: For the purposes of this planning effort, the Gorge is defined primarily as coincident with the Mission Trails Regional Park (MTRP) boundary but also includes privately owned land between MTRP and Mast Boulevard. The Gorge reach offers a strong sense of enclosure reinforced by the rising walls of Fortuna Mountain and Kwaay Paay Mountain. Mission Trails Regional Park is one of the "jewels" of the San Diego River watershed, and the San Diego River Park offers a means of linking this stunning resource to the area's other principal natural features.

Old Mission Dam



Gorge Section

Condition: Established in 1974, Mission Trails Regional Park has preserved the valley's original landscape of sage scrub, chaparral, oak woodland and riparian habitats in exceptional condition. At 5,800 acres, Mission Trails Regional Park is one of the largest urban parks in the nation, and a regional destination for hiking, biking, and wildlife viewing. The rich historic layers of the San Diego River valley are revealed in many ways within the park. The Kumeyaay, Spanish missionaries and settlers, and 19th and 20th century ranchers and farmers have all left their mark on the land now within the bounds of Mission Trails Regional Park.



South Fortuna Mountain

Recommendations:

- Support the Mission Trails Regional Park Master Development Plan.
- When Superior Mine redevelops, create a unpaved hike/bike trail at the west end of MTRP that will link the proposed multi-use path through the Superior Mine site with existing hike/bike trails in MTRP
- Create an unpaved hike/bike trail linking the Mast Boulevard trail head with the proposed multi-use trail adjacent to Carlton Oaks Golf Course that will ultimately connect MTRP with Mast Park and Santee Lakes in the City of Santee

Efforts in the Gorge should align with and support the mission of Mission Trails Regional Park. The goals of the San Diego River Park Master Plan are in harmony with those of the Mission Trails Regional Park Master Development Plan and focus on continually improving hydrology and habitat along the length of the river. The San Diego River Park Plan should seek collaborative opportunities with MTRP to further enhance and preserve the conditions already present at the park. That effort should explore the possibility of a soft surface trail linking the river corridor west of the park with Father Junipero Serra Trail and the MTRP Visitor Center. Planning efforts should also consider improving the bike lanes or creating a trail if impossible within the Mission Gorge Road right-of-way; this trail would create internal and external connection, within the park and with up-stream communities.

The Gorge in Mission Trails Regional Park

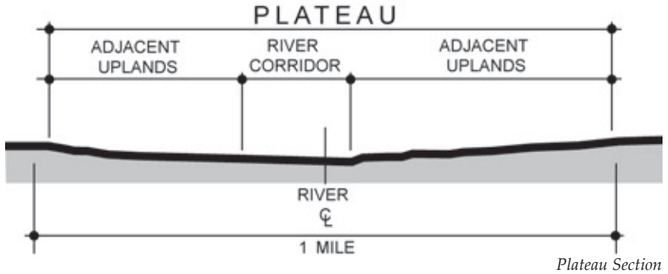
Plateau

Intent: East of Mission Trails Regional Park, the terrain again opens and reveals expansive views to the hills above Santee and to the distant mountains in the Cleveland National Forest. This expanse offers a sense of release from the narrow, enclosed condition of the river in the Gorge Reach. The Plateau is an opportunity to integrate the river experience with adjacent development and the City of Santee. The San Diego River Park should focus on connecting Mission Trails Regional Park with Mast Park and Santee Lakes. These points should be linked by a multi-use path system integrated within a larger habitat corridor.

Condition: The San Diego River is negatively impacted by a variety of physical constraints. A dike along the southern edge of the Carlton Oaks Golf Course and SR-52 to the south and west separates the river and the golf course. Heavy infestations of Giant Reed, Brazilian pepper, and fountain grass (*Pennisetum sp.*) and other exotic species degrade water and vegetative quality. Other than golf, recreational resources are minimal, but an informal pedestrian trail exists on the north side of the river at the east end of Carlton Oaks Golf Course through Environmental Trust land and to the City of Santee.

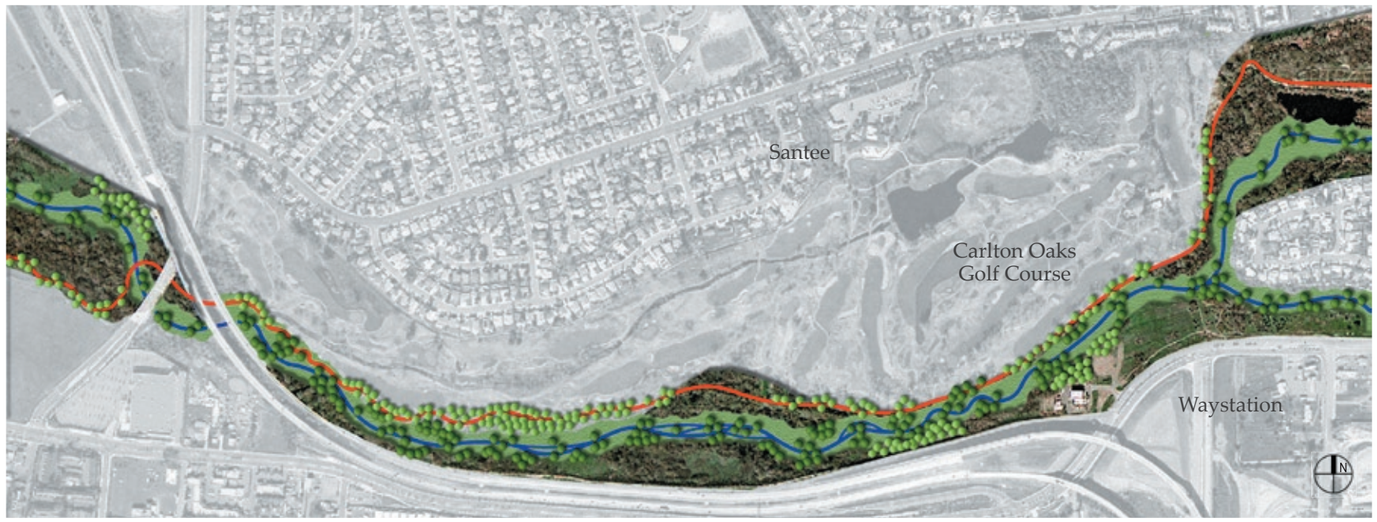
Recommendations:

- Create a trail head and gateway to the City of San Diego sections of the San Diego River Park.
- Build trail along the south edge of Carlton Oaks Golf Course.
- Establish a minimum open space corridor that follows the 100 year floodway.
- Create a connection under SR-52 leading to Mission Trails Regional Park.



Plateau Section

Invasive vegetation management project in progress



Conceptual San Diego River Park at Carlton Oaks Golf Course

Key Sites:

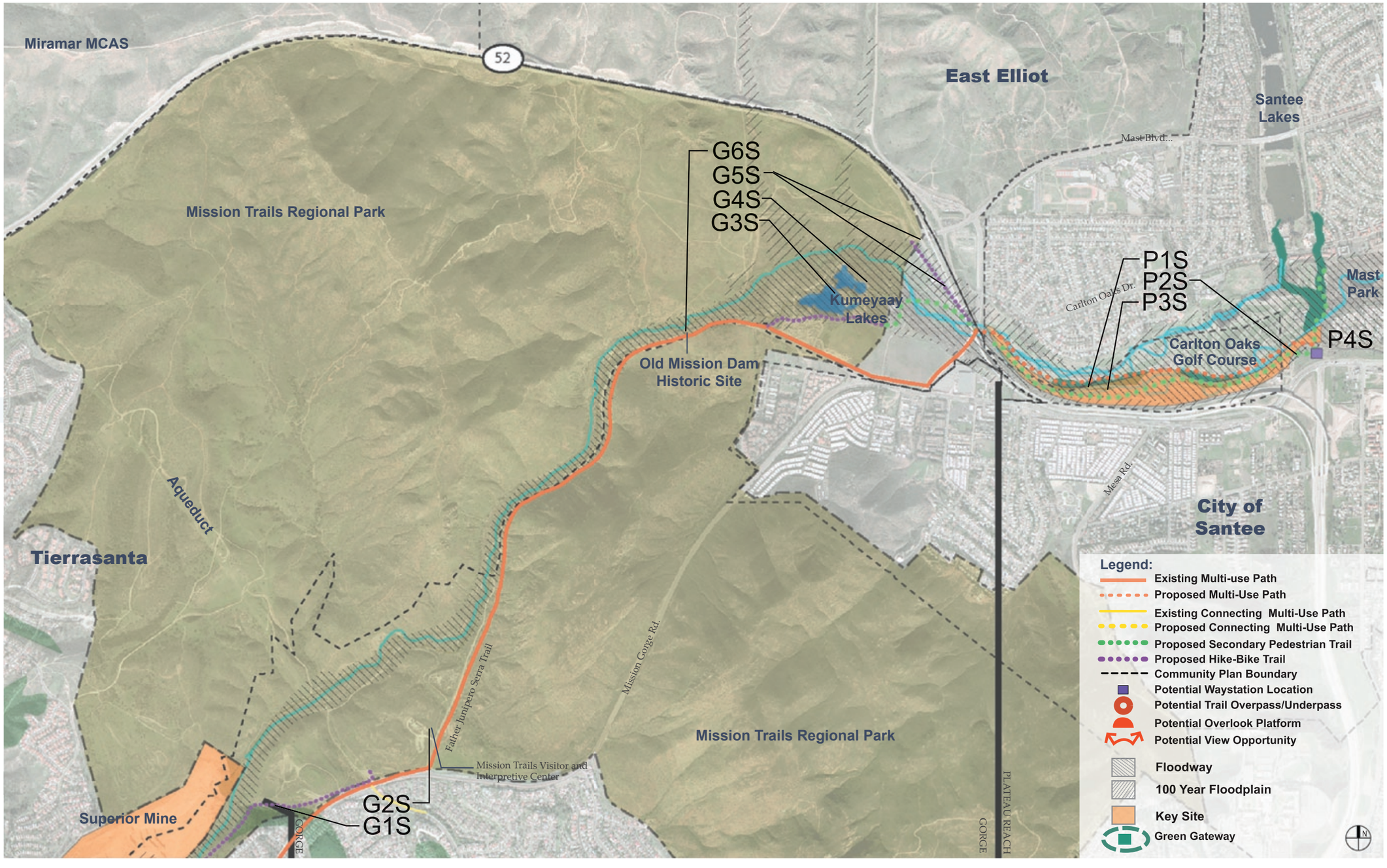
Carlton Oaks Golf Course

There is potential for the golf course to accommodate a trail on its southern edge near the river; this possibility should be explored when the Carlton Oaks Golf Course lease comes due for renewal. Land currently not used as golf course should be negotiated out of the lease to be for trail and open space. The long term potential for this area to evolve to become part of the San Diego River Park should also be considered. Redesigning the golf course to be more sensitive to the hydrology of the river and creating habitat corridors are ways in which the course may accommodate multiple user groups.

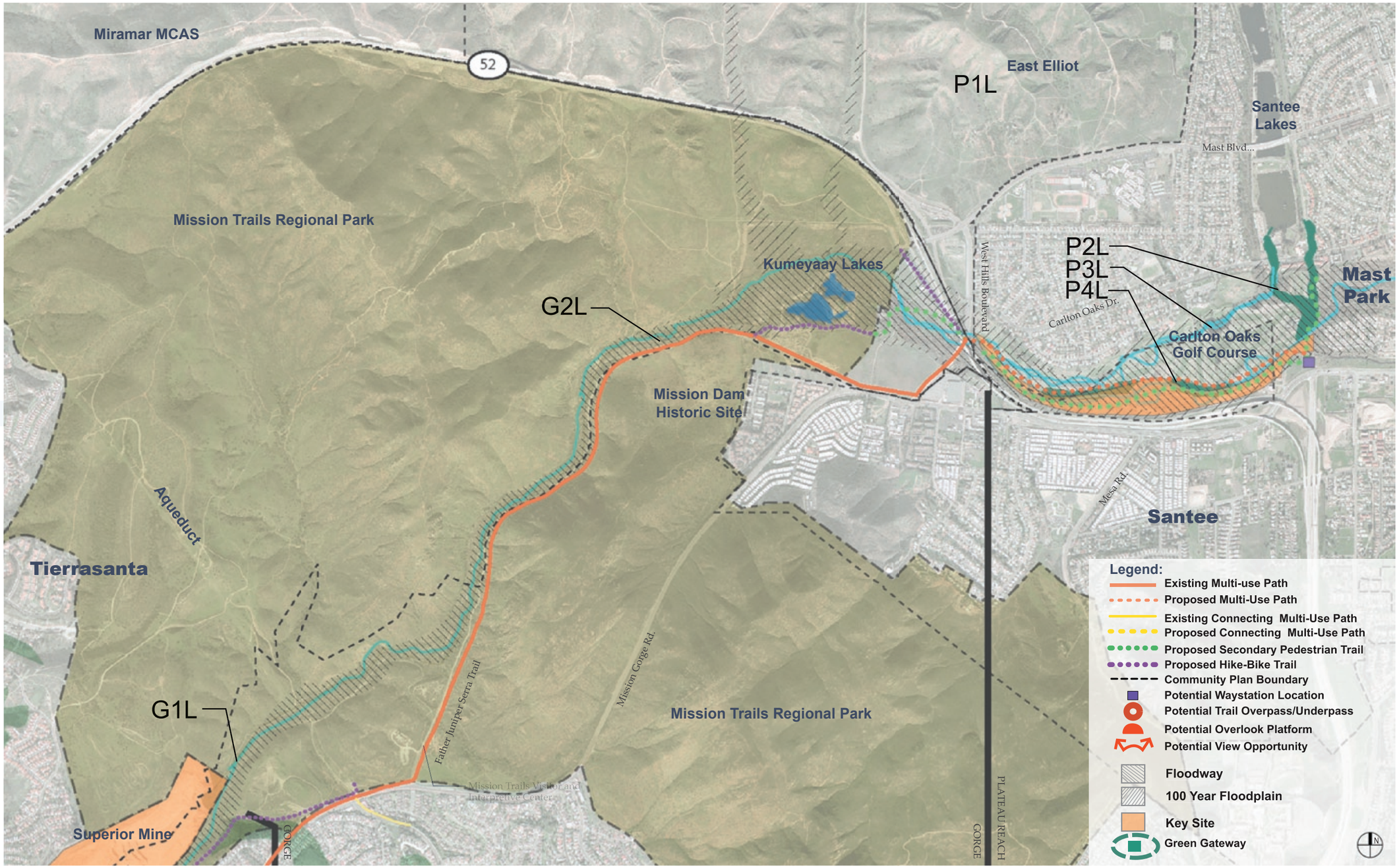
Key Points

- Critical location for connecting the City of San Diego segment of the San Diego River Park with Santee and upstream segments of the Park.
- River corridor is channelized, narrow and constrained on the south side of the golf course. Open space corridor will provide adequate width to re-contour the river channel. Improved channel should allow increased river length and meander, increased riparian habitat, and run-off buffering at the golf course.
- An open space corridor that follows the 100 year floodway alignment is recommended, with trail corridor/buffer adjacent to golf course.
- Connection under SR-52 is necessary to achieve continuity of San Diego River Park, and to connect trail with City of Santee's Mast Park.
- Build upon vegetation management projects already underway.

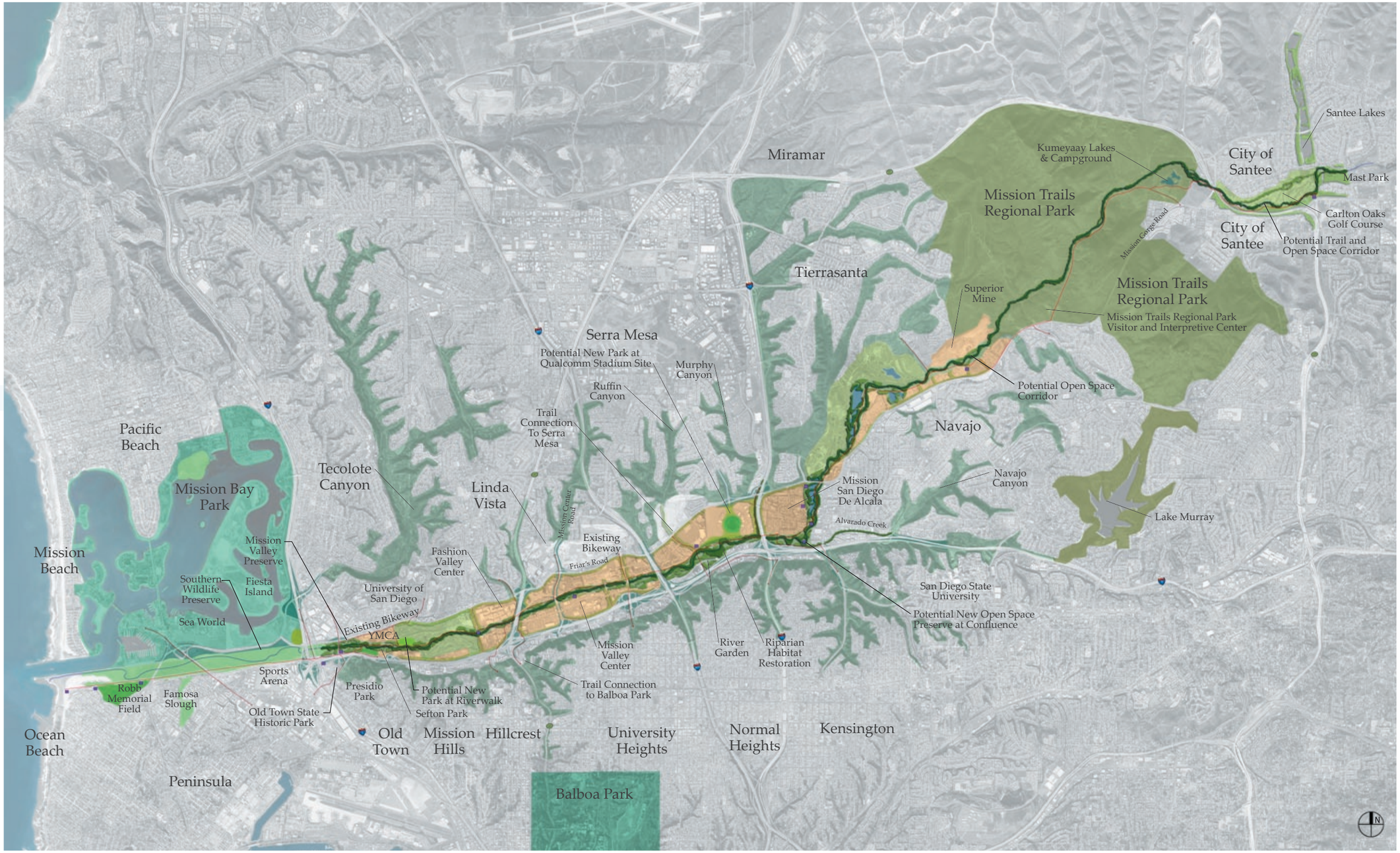
Cottonwood Gallery and secondary stream channel on Carlton Oaks Golf Course


Miramar MCAS
52
East Elliot
Santee Lakes
Mast Blvd...
Mission Trails Regional Park
G6S
G5S
G4S
G3S
Kumeyaay Lakes
Old Mission Dam Historic Site
P1S
P2S
P3S
Carlton Oaks Dr.
Mast Park
Carlton Oaks Golf Course
P4S
Aqueduct
Tierrasanta
Father Junipero Serra Trail
Mission Gorge Rd.
Mesa Rd.
City of Santee
Mission Trails Visitor and Interpretive Center
G2S
G1S
Superior Mine
GORGE
Mission Trails Regional Park
PLATEAU REACH
GORGE
Legend:
Existing Multi-use Path
Proposed Multi-Use Path
Existing Connecting Multi-Use Path
Proposed Connecting Multi-Use Path
Proposed Secondary Pedestrian Trail
Proposed Hike-Bike Trail
Community Plan Boundary
Potential Waystation Location
Potential Trail Overpass/Underpass
Potential Overlook Platform
Potential View Opportunity
Floodway
100 Year Floodplain
Key Site
Green Gateway
N

KEYNOTE	RECOMMENDATION	IMPLEMENTATION	BENEFITS			
			HYDROLOGY	ECOLOGY	RECREATION	EDUCATION
Short Term - Gorge						
G1S	Support Mission Trails Regional Park efforts to create a continuous trail system and identify potential connections between the San Diego River Park Trail and existing hike/bike trails in MTRP.	Continue dialogue with Mission Trails Regional Park Master Plan and San Diego Bicycle Master Plan to identify potential alignments within Park and along Mission Gorge Road.	●		●	
G2S	Support existing and proposed interpretation of the river and history of the park at Mission Trails Visitor and Interpretive Center.	Continue dialogue with Mission Trails Regional Park Master Plan and Citizens Advisory Committee.				●
G3S	Support existing interpretation of the river and the history of valley at campground and Kumeyaay lakes.	Continue dialogue with Mission Trails Regional Park Master Plan and Citizens Advisory Committee.				●
G4S	Support the implementation of the Kumeyaay Lakes Dredging and Berm Restoration Capital Improvement Project.	Continue dialogue with Mission Trails Regional Park Master Plan and Citizens Advisory Committee.	●	●		●
G5S	Create an unpaved hike/bike segment of the San Diego River Park Trail between MTRP at the MTRP East Fortuna trail head and the proposed multi-use path segment on the south edge of Carlton Oaks Golf Course. Connect the trail to Father Junipero Serra Trail following West Hills Parkway and Mission Gorge Road.	Coordinate with Mission Trails Regional Park Master Plan, citizens advisory committee, private land owners and appropriate agencies to identify specific trail alignment, establish easements and means of implementation.	●		●	●
G6S	Support the implementation of the Old Mission Dam Dredging Capital Improvement Project.	Continue dialogue with Mission Trails Regional Park Master Plan and Citizens Advisory Committee.	●	●		●
Short Term - Plateau						
P1S	Create San Diego River Park Trail segment along south edge of Carlton Oaks Golf Course and improve native vegetation and habitat along proposed trail corridor.	Coordinate with appropriate agencies, community groups and land owners to identify potential trail alignment adjacent to golf course. Initiate dialogue with Caltrans and golf course owners to identify potential alignment and methods to create trail connection under SR-52 and West Hills Boulevard.			●	
P2S	Create historic interpretation zone.	Install signage, interpretive kiosks and furnishings providing information about the San Diego River Valley and its importance to the settlement of the valley as well as the natural systems and ecology of the region. Implement as part of the trail development.			●	●
P3S	Capitalize on existing tree galleries in golf course to create buffer along river and remove exotic vegetation from river corridor.	Initiate dialogue with golf course owners and City of San Diego to explore potential to evolve golf course edge toward native plant species and to develop a vegetation management plan.		●		●
P4S	Create San Diego River Park Trail head, as a gateway to San Diego at Carlton Oaks Golf Course. Coordinate with City of Santee to create habitat and trail connection to Santee Lakes and to Mast Park.	Initiate dialogue with City of Santee planners, Padre Dam Municipal Water District, golf course owners and City of San Diego to identify potential trail alignment, vegetation changes, and kiosk/trail head location. Coordinate with improvements proposed by Santee Lakes Master Plan.		●	●	


Miramar MCAS
52
Mission Trails Regional Park
East Elliot
P1L
Santee Lakes
Mast Blvd...
Kumeyaay Lakes
G2L
West Hills Boulevard
P2L
P3L
P4L
Carlton Oaks Dr.
Mast Park
Carlton Oaks Golf Course
Mission Dam Historic Site
Aqueduct
Tierrasanta
Father Juniper Serra Trail
Mission Gorge Rd.
Mesa Rd.
Santee
G1L
Mission Trails Visitor and Interpretive Center
Mission Trails Regional Park
Superior Mine
GORGE
PLATEAU REACH
GORGE
Legend:
Existing Multi-use Path
Proposed Multi-Use Path
Existing Connecting Multi-Use Path
Proposed Connecting Multi-Use Path
Proposed Secondary Pedestrian Trail
Proposed Hike-Bike Trail
Community Plan Boundary
Potential Waystation Location
Potential Trail Overpass/Underpass
Potential Overlook Platform
Potential View Opportunity
Floodway
100 Year Floodplain
Key Site
Green Gateway
N

KEYNOTE	RECOMMENDATION	IMPLEMENTATION	BENEFITS			
			HYDROLOGY	ECOLOGY	RECREATION	EDUCATION
Long Term - Gorge						
G1L	Collaborate with Mission Trails Regional Park to create waystation at edge of Mission Trails Regional Park with interpretive information.	Install signage, interpretive kiosk and furnishings with implementation of San Diego River Park Trail segment as part of the Superior Mine redevelopment.			●	●
G2L	Continue to support maintenance of the Old Mission Dam dredging. This project may need to recur in the future on a regular basis.	Explore the potential to develop a low impact approach to sediment removal that will allow small amounts of sediment to be reintroduced into the river system downstream to invigorate sediment transport process.	●			●
Long Term - Plateau						
P1L	Explore potential to connect with new open space to north and east.	Monitor future action related to land acquisition and explore opportunities to create wildlife habitat, trail linkages under or over SR-52 to East Elliot and interpretation of San Diego River Valley history.	●	●	●	●
P2L	If golf course use were to change in the future, entire site should be preserved for natural open space with a neighborhood scale park as a gateway to the San Diego River Park.	Monitor future action related to potential land use change.	●	●	●	
P3L	Integrate secondary stream channel through golf course with main San Diego River channel and create buffer. Expand native vegetation through golf course for wildlife habitat and to increase filtration to improve water quality.	Initiate dialogue with Carlton Oaks Golf Course to identify methods to modify golf course to be more environmentally compatible with river corridor.	●	●		
P4L	Explore potential to realign some golf holes to eliminate dike, recreate stream meander, realign multi-use trails and expand native wildlife habitat. Consider a new concept for the golf course as a links or target course that is substantially native vegetation.	Initiate dialogue with appropriate agencies, community/special interest groups and Carlton Oaks Golf Course to explore potential changes to course.	●	●	●	●



Illustrative Master Plan